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PATIO GARDENS

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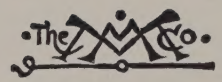

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GATE IN SEVILLE

PATIO GARDENS

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BY

HELEN MORGENTHAU FOX
Author of "Garden Cinderellas," etc.

WITH ILLUSTRATIONS BY
RALPH L. REASER

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TO

JEAN C. N. FORESTIER

"All palaces in the world are nothing when compared to that of Dimashk, for not only are its gardens filled with the most delicious fruits and sweet-smelling flowers, beautiful prospects and limpid, running waters, clouds pregnant with aromatic dew and lofty buildings; but the earth is always perfumed, for Morning pours on it her gray amber and Night her black musk."
—*Quoted by* Al Makkari *in "History of the Mohammedan Dynasties in Spain."*

INTRODUCTION

IT seems presumptuous to write about Spanish gardens without having lived and gardened in Spain. However, if my body only has been to Spain for two delightful visits, one in the spring and the other in summer and fall, my spirit has spent many years among its tiled patio gardens and honey-colored hills.

Books on the various phases of Spanish life abound from the translations of Arab books written in the tenth century down to the last traveler's impressions.

A copy of the French translation of Ibn Al Awam's "Book of Agriculture" and of Al Makkari's "Mohammedan Dynasties in Spain," translated by Gayangos into English, have been on my table during the day and at my bedside at night for the past year. These with "Don Quixote," "The Bible in Spain" by Borrow, Marcel Dieulafoy's "Art in Spain and Portugal," the works of Ibañez, Baroja, Quintero, Unamuno, Galdos, and Valdes, Washington Irving, Théophile Gautier, Havelock Ellis, Ford, and John Hay give a fairly complete picture of the land and the people.

Very little has been written on the gardens, and it seems strange that one of the most exquisite and distinctive forms of Spanish art should be left out of a book like the "Burlington Magazine Monograph on Spanish Art."

The Bynes' "Spanish Gardens and Patios," Miss Nichols' "Spanish and Portuguese Gardens," Monsieur Georges Gromort's "Jardins d'Espagne," and part of Monsieur Forestier's "Gardens" are all excellent, but as they have not approached the subject from the point of view of the present-day garden maker, as I have tried to do, I feel justified in writing a book on Spanish gardens.

Spanish gardens are a mingling of Eastern and Western ideas and represent an original contribution to garden art. Until you go to the East and look beyond the narrow valleys of European thought onto the broad plains of Eastern culture it is difficult to appreciate Oriental philosophy and art. And perhaps that is why Spanish gardens seem strange to Europeans and Americans.

It is my hope that this book will give an idea of the spirit and attitude of the Spaniards toward their gardens. I have tried to show how ingeniously they adopt and change a formal plan to suit the tastes of the individual who dwells in them. How no object is too insignificant to be molded into something beautiful whether it is a drainpipe, a waterspout, a bench, or wall treatment. The descriptions and pictures are not intended to be copied, but to indicate to garden makers original ways of solving problems which might occur in various climates and situations.

As usual, every one has been most kind and helpful to me. I wish to thank Monsieur Forestier, who showed me behind the scenes of the Spanish garden and helped me through long conversations, letters of introduction, measurements, plans, and above all through hearty encouragement. Then Mr. Robert C. Scott for his interest and kindly suggestions. He motored Miss Margaret Holz, my son Tim, and me from Barcelona to Jerez, from Valencia almost to the Portuguese border into villages far from a railroad where no tourists ever go and which I never would have known about without his guidance. With his help I was encouraged to knock at the gates of convents, palaces, and private homes, and saw enchanting patios and gardens which will be beautiful memory pictures to cherish forever. I also wish to thank Mr. Ralph Reaser for his fine drawings and copious notes; Mr. William Tachau for technical information; the Señora Sorolla for permission to portray the garden designed by her husband; Mr. J. L. Pierce, Miss Marion Miller of the Metropolitan

Museum, Dr. Marian Kenworthy, and Mr. Leon Whipple; also the Librarians of the New York Public Library who made research a pure joy by bringing me every book I had ever heard of and hovering over me in a positively maternal way for the three months I spent in their hospitable midst.

The Bibliography does not mention all the books I "consulted," but only those I think are helpful to gardeners.

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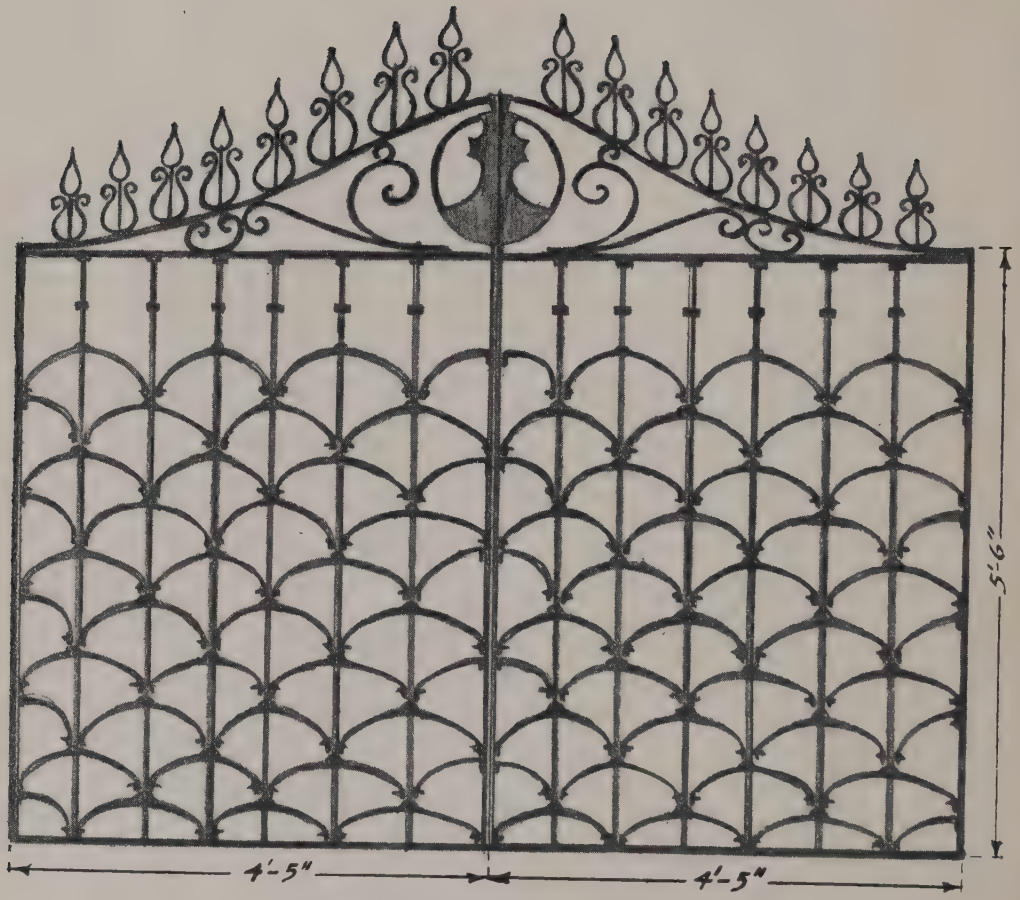
PATIO GARDENS

TRANSPLANTING SPANISH GARDENS



Wrought-iron Gate, Santa Ana, Cordoba

TRANSPLANTING SPANISH GARDENS

"O my beloved Cordoba! When shall I see thee again!
Thou art like an enchanted spot, thy fields are luxuriant gardens, thy earth of various colors resembles a block of rose-colored amber. . . ."

—*Al Makkari.*

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THE Spanish garden, with few flowers, no grass, the ground bare or paved with tiles, and the planting principally of fragrant green, is different from all other gardens in Europe.

What is the charm of these gardens?

They are a dream come true, the dream of one who toils all day in the burning heat and dazzling light. They are a shaded green paradise scented with fragrant plants, cooled by rippling waters, and secluded by vine-clad walls from the dusty world without.

For Spain, like our own Southwest, is a parched brown country where the purple shadows stand out sharply in the glare of the fierce blue sky for six months of the year. Only in spring are the fields painted with the fresh young green of the sprouting crops.

The Spanish garden grew out of the patio and never diverged far from it. The patio is a hollow square open to the sky surrounded by the four walls of the house. This plan of a house is not peculiarly Arabic but was common all along the Mediterranean littoral, for it was the most practical and comfortable arrangement for a hot climate. The Greeks called their courtyard a peristyle and the Romans named theirs an atrium, and before them the Persians and Egyptians had built their homes around an open

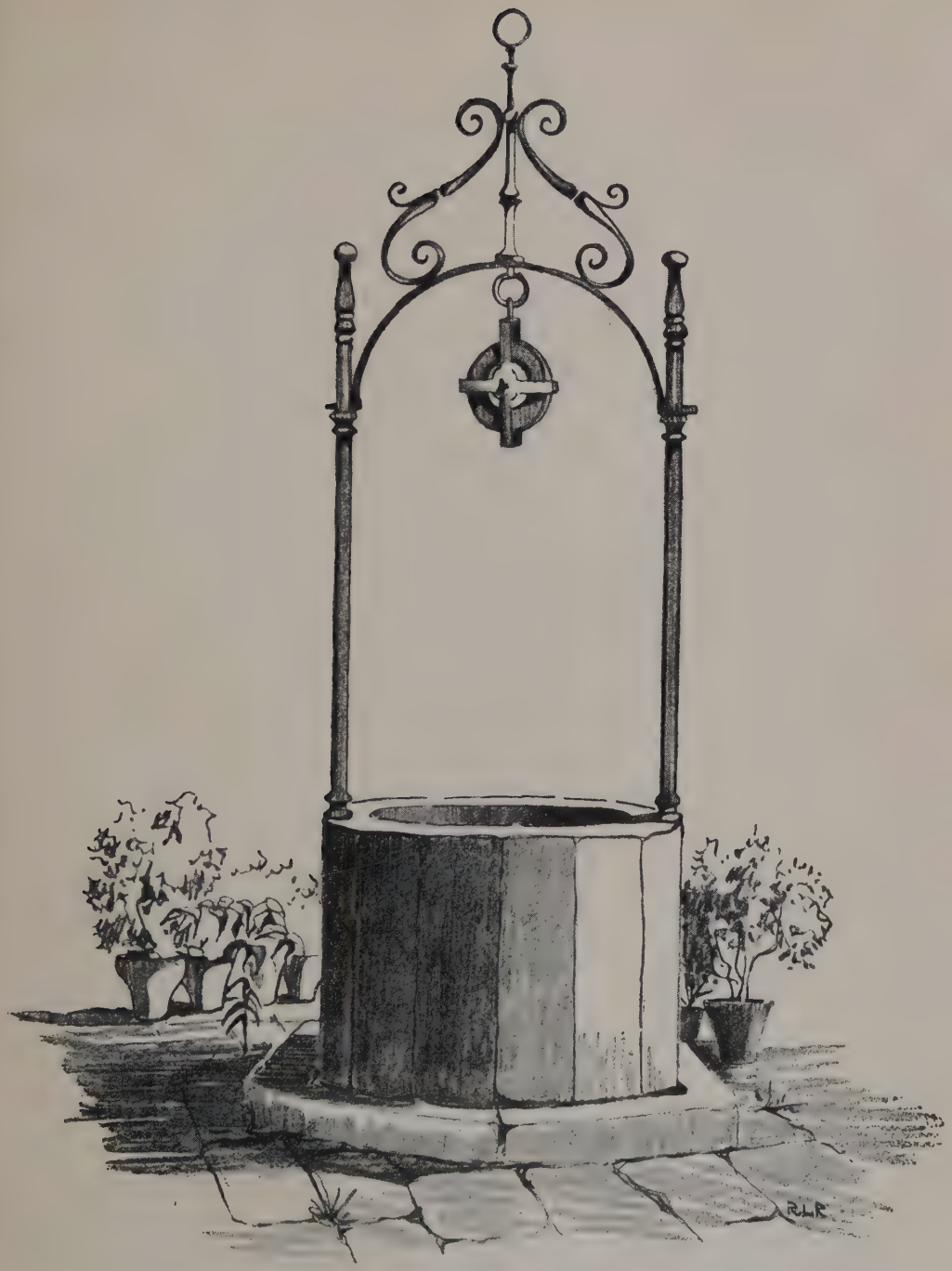
rectangle. Now, as in the olden days, the patio is the family living room, gay with vines and potted plants and refreshed by water trickling in pools or cisterns.

Like the patio, the garden is always a rectangle enclosed on all four sides by walls. When it is small, it consists of one enclosure and when it is larger, two, three, or even twenty separate gardens are strung together. A door in the wall leads from one to the next like the rooms in a house, only a house roofed by the sky, its walls hung with vines, a tiled floor for a carpet, pots of Lemon Verbena (*Lippia citriodora*) or Sweet Basil (*Ocimum basilicum*) for knickknacks and its chief ornament a fountain in a marble basin.

Whether it is on the hills of Granada, the streets of Madrid, or a large park, as in Seville, it is a city garden. Out in the country surrounding the *haciendas* (ranches) the rows of gray-green olive or pink-blossomed almond trees come right up to the entrance and there is no garden. The effect is so charming that modern houses in California are often set down among the same kind of trees.

Although the Spanish garden is primarily a Southern garden suited to a hot, dry climate, yet the architectural scheme, the planting plan, the pots and pavements are so adroit for a small space that they make admirable models for far other climates and situations than the originals. They can be adapted for city roof gardens, for restaurants, for small back or front yard gardens, for a city plaza or square in front of a public building, where the traffic and dust make it impossible to have anything but the suggestion of a garden. They teach us how to brighten a gloomy courtyard with a Bougainvillea festooned against the walls and a few Orange trees so that one enters a bank or courthouse in a cheerful frame of mind, having caught a whiff of Orange blossom and a flash of color on the way.

When we transplant a Spanish garden we must not copy each turn and



A Well

(Copied from a photograph in "Arte y Decoration en España IV." It is found in the Patio of the Casa de las Conchas, Salamanca)

twist of the walls, each palm or flowerpot, but reproduce the spirit of the originals. The garden must harmonize with its surroundings whether it be a city street, a rocky shore, or undulating countryside. Even the loveliest garden will not look well after it has been torn away from its original setting and reproduced stone for stone elsewhere.

In Northern climates one must wave a wand over them to metamorphose the materials and plants. The walks of tile can be changed to brick or grass with stepping-stones, the Cypress to Cedars, Oranges to Apple trees, and the Oleanders and Cinerarias to any of the hundreds of shrubs and flowers hardy in the North.

The small size of these gardens, and the absence of fussy details and simplicity which came about on account of the heat, makes them easy to care for. There is no grass to cut or edges to trim, few weeds to pull, and the sparse planting takes little pruning or spraying. All one needs is a watering can and a broom for most of them. So the busy person who finds hired labor prohibitive and yet likes to have a few plants flowering at his front door can water and sweep his little garden himself.

The Spanish gardens are old; in fact any work of art as young as three hundred years seems almost of the present in Spain. To make it clear what the mingled influences were which brought about the present forms of pavements, walls, benches, and porticoes in the Spanish garden, it will be necessary to sketch their history and geographical background.

Along the Mediterranean there was always an interchange of ideas carried by the traders and artisans from Tyre to Cadiz, and although the fashions did not travel as quickly as they do from Paris to Capetown to-day, the people were by no means isolated from outside influence. Besides the peaceful interchange of ideas, in Spain as in other countries there was an intermittent stream of invaders who came down from Northern Europe and

across from Africa. The invading bands were small and were quickly absorbed by the native population. Yet each invasion brought a different twist of religious belief, expressed in new forms of art.

Before the Romans came to Spain, in 201 B.C., there had been Phœnician and Greek colonies along the coast, followed by the Carthaginians who had come across the Straits from Africa. The Greeks contributed to the architecture and pottery, and perhaps to the other crafts. The Romans irrigated and cultivated Southern Spain, which was one of their richest provinces, and built prosperous cities, embellished with fine temples, bridges, aqueducts, and amphitheaters.

After the Romans, in the early fifth century, the Visigoths came from the East. From their day the Byzantine architecture was known in Spain, and capitals, arches, basins, and wellheads inspired by Byzantine models were occasionally used in the gardens on down to the Spanish Renaissance in the sixteenth century.

In 711 A.D. the Syrian Arabs in turn invaded and ruled Spain. They soon lost the northern provinces and settled from Toledo south where the climate was congenial to them. Here they stayed until the thirteenth century, when they lost their fairest cities and only held the country around Granada for another two hundred years. Although they had been nomads of the desert when they came to the fruitful land of Southern Spain they fell in love with it and became passionate gardeners. They loved to garden as the English and Americans do, and their poetry is full of references to fragrant flowers and rippling fountains. Such as (quoting from Al Makkari):

> When I think of Valencia every other city vanishes from before my eyes, . . .
> God has given it for a dress its green meadows sprinkled with flowers, of which the sea and the river form the skirts.

Rosy cheeks were compared to Anemones and these flowers in turn to the stars as:

> When the stars in our globe vanish before our eyes it is not in the West that they hide their luminous orbs; indeed they come to deposit them in the midst of these parterres.

and

> It is a land where if thou walkest the stones are pearls, the dust is musk, and the gardens paradises.

But elsewhere, in the tone of an exasperated tourist, a writer says if the gardens are paradises the roads leading to them are so many hells.

Their houses and gardens were so intermingled that it was hard to knew where one began and the other ended. The Arabs had seen and heard of the wondrous beauties of the Persian gardens and Byzantine buildings on their journeys, so when they came to build their own they called in Persian and Byzantine workmen to help them. They lit their gardens at night, and covered their buildings with glittering ceramics as the Persians had done, and copied their ways of conjuring songs out of the water, confining it in pools and basins, and letting it ripple in tiled canals.

The Arabs collected antiques as modern Spaniards and other folks do to-day. They helped themselves liberally to Roman and Visigothic columns, capitals, basins, carved stones, and polished slabs of marble which they found in the ruins and incorporated them into their walls and pavements. They took the best of the garden art handed down to their day from Mesopotamia, Persia, Greece, and Rome, and crystallized it into the loveliness we know as the Spanish garden; for the gardens have changed but little, and are almost as they were when Boabdil cast a last lingering glance at the Alhambra on his way to exile after he had lost his kingdom of Granada.

During the period of Muslim domination, Spain was divided into little principalities constantly at war with each other. Fighting was the engrossing sport of the Spanish hidalgo, and whether he was a Muslim or a Christian, he considered honest toil beneath him. The Arabs, Berbers, and other tribes of North Africa who came across the Straits of Gibraltar into Spain were the artisans, the potters, weavers, and masons. The Jews were traders and artisans, too.

The Muslim period of domination over Spanish art is longer than their political supremacy. The Hispano-Moresque customs and art became the true expression of the Spanish people of the period and left an indelible impression for all time. From the eighth to the early seventeenth century the invaders were called Arabs, Moriscoes (baptized Muslims), Moors, or Saracens. Mudejar art is early Spanish Renaissance modified by Moorish influence. (This is to explain the use of these words.) All this time the people were converted from one religion to another and back again, and there was much intermingling of races.

After the last Muslims were expelled, early in the sixteenth century, the next source of inspiration came from Italy. In Spain, the Renaissance was divided into two phases; the earlier, during which the Escorial was built, was called Plateresque. The gardens here lack inventiveness and are a heavy repetition of beds edged with high green hedges. At this period new worlds were being discovered and the Spaniards came in contact with the wild extravagances of Peruvian and Mexican art and first came to know Chinese art. All these new ideas stimulated them to go on an orgy of architectural forms known as Baroque (the late Renaissance). They indulged in spiral columns and stood plump, simpering maidens in perilous niches on the façades of buildings, and terminated their spires with pointed finials, often shaped like tongues of flame. When the Baroque became simplified it was delightful, and its graceful curves bestowed an elegance upon the humblest

bench or pool. The gardens of La Granja and others date from this period and Baroque doorways, fountains, and other accessories are often found in the Spanish gardens of to-day.

This ornate art, for some strange reason, was the one chosen by the fervent priests to build their missions and churches and so came to the Southwestern United States, Mexico, and South America. It became the "mission style" after it had been much simplified, because in America the Indian workmen were not sufficiently skilled to carry out the more extravagant flourishes.

The gardens of Spain show the traces of each of these periods in their architectural settings, their wooden doors and shutters, iron window grilles, flowerpots and tiles. The gardens are rarely carried out in one period, but may have the clover-leaf archway of the Saracens, intricately carved capitals in the Byzantine style to support its arches, Persian tiles, and perhaps a little shell-like basin dug up from Roman ruins for a fountain. All the styles harmonize, for they grew in the same climate and were made of the same clay or stone, and they all have gone through the crucible of the virile Spanish personality; for, after all, it is the climate and character of the people which determine the form and structure of the art of a country.

All day the Spaniards like to live shut away from crowds behind their walls in the hearts of their families. That is, the women do, while the men sit in the cafés. The families leave the patio at night, when they go out to enjoy the cool air. This custom has formed the gardens, made them aloof little places, the extreme opposite to the rocking-chair on the wide-open front porches of America.

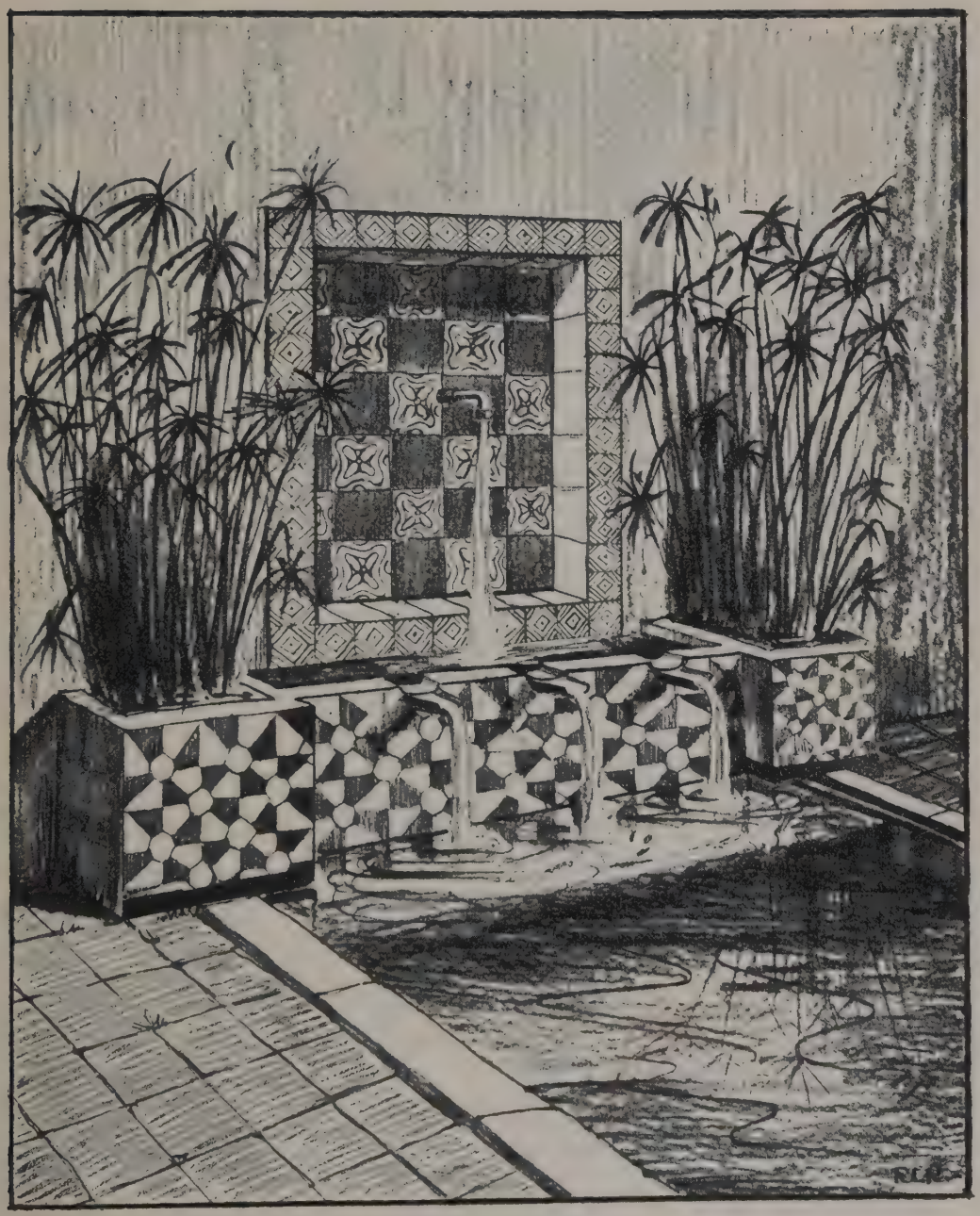
There are three climates in Spain where gardens flourish—the cool, rainy one in the North, the semi-tropical one of Andalusia in the South, and the tropical climate along the coast from Cadiz to Valencia. The typical Spanish gardens were built in Andalusia, where almost every plant that grows

will thrive and where the Roses are said to smell sweeter and women to be prettier than anywhere else in the world.

To-day in Spain there is a renaissance in gardening, which is largely due to a Frenchman, Monsieur J. C. N. Forestier, who laid out the Parque Maria Louisa at Seville, the Parque Montjuich at Barcelona, and many other public and private gardens. He has been studying the Arabic gardens of Spain and Portugal for the last twenty years and has unearthed lovely old gardens tucked away in the country unknown to their absentee owners. Although he was trained in the best French schools, Monsieur Forestier's work is quite Spanish, for he has based it all on the old Arab gardens. However, he is an ardent advocate of modern art and this has crept into his work and been the delightful road along which the old Spanish garden has traveled to the present day. At Barcelona in the Parque Montjuich is the perfect example of a modern garden in Spanish guise. Here are the same proportions, the tiles, pools, and fragrant hedges of the tenth-century gardens and yet in the spirit of a distinctly modern garden. His creations have made the whole world aware of the delights of the Spanish garden, so that now in Paris, Westchester County (New York), the Côte d'Azur, California, and South Africa, tiled channels for water, ceramic benches, and pavements, glorietas, and pots are becoming a familiar part of garden scenery.

Monsieur Forestier has enriched the gardens immeasurably through introducing new plants, combining the old ones in new ways, and arranging charming color combinations. He has aroused a love for moonlit gardens, Rose gardens, and Water-Lily gardens through the lovely ones he has created.

When we adapt the Spanish garden, we, too, will make a chic modern version to fit in with our present way of thinking and living. The Arabic gardens were built when all work was done by hand in rounded gestures. The rhythmic motions of drawing water, hoeing, and reaping were repeated



WALL FOUNTAIN

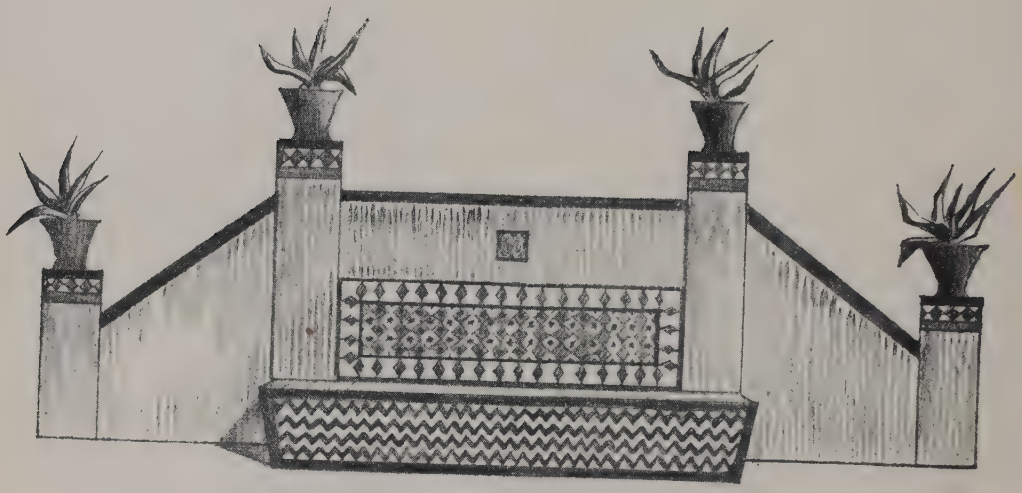
(Copied from "Architectural Details, Spain and the Mediterranean," by Richard S. Requa, J. H. Jansen, Cleveland, Ohio, Publisher)

in the curves of the arches, the rounded columns, the tendrils, and volutes of the flowery decorations on the capitals. To-day, instead, we have the sharp, jerky up-and-down motions of derrick, pistons, and drills, and our art reflects this in the perpendicular lines, the sharp angles, and straight, flat surfaces.

Strange as it may seem, the Spanish gardens built as cool retreats for languishing señoritas to rest and dream away the hot days suit our modern hurry-up lives. Their plain, whitewashed walls, their emptiness and simplicity lend themselves to our present-day requirements, while the decorations of geometric patterns carved on the doors and shutters and inlaid on the tiled pavements and dadoes are very close to the skyscraper lines and angles of modern art.

When we transplant them to another land, if we keep faith with the dream which first inspired them, we, too, will have a shady green garden in a blue-and-gold world, an emerald in a setting of sapphire and topaz.

MAKING THE MOST OF A SMALL SPACE



Tiled Bench, Seville

MAKING THE MOST OF A SMALL SPACE

"Jasmine! White Jasmine!
In my patio 'tis snowing.
Like snow in my patio
The Jasmine is falling."
—*The Brothers Quintero.*

IN the gardens there is no attempt whatever to imitate nature, for to the Spaniards nature means dusty fields with rows of olive trees or plateaus rimmed with mountains baring their rocky bosoms to the burning sun. Instead they draw upon their imaginations for ideas and build cool green gardens with singing fountains like the scenes from an Arabian Nights' tale.

Although the Spanish gardens begin with a balanced plan, as time goes on this is changed to meet the needs of life lived within them. Wings jut out and walls wander on regardless of doors and windows which rarely balance or are straight above each other, and there are many deflections from the exact squares and circles of the garden plan. A pool or cistern is moved to one side to be more convenient, pots which formed accents are stood in rows close to the wall to be in the shade, while benches, instead of facing each other stiffly or at right angles, turn their backs to look at the view.

The whole is so well done that each detail seems exactly right and looks as if it could not have been different, an effect which comes only after a long period of study, of trial, and doing over.

Seeing so much inventiveness and originality encourages the timid gardener to be bold and experiment too. However, he who experiments, besides being bold, must have a critical eye and be ready to discard his work no matter how expensive or laborious it was if it does not come up to his standard. It is not necessary to go the lengths of Prinz Pückler von Muskau who did over vast stretches of landscape three or four times until they suited him and

even removed villages when they interfered with his compositions, but we can emulate his spirit within the confines of our modest activities.

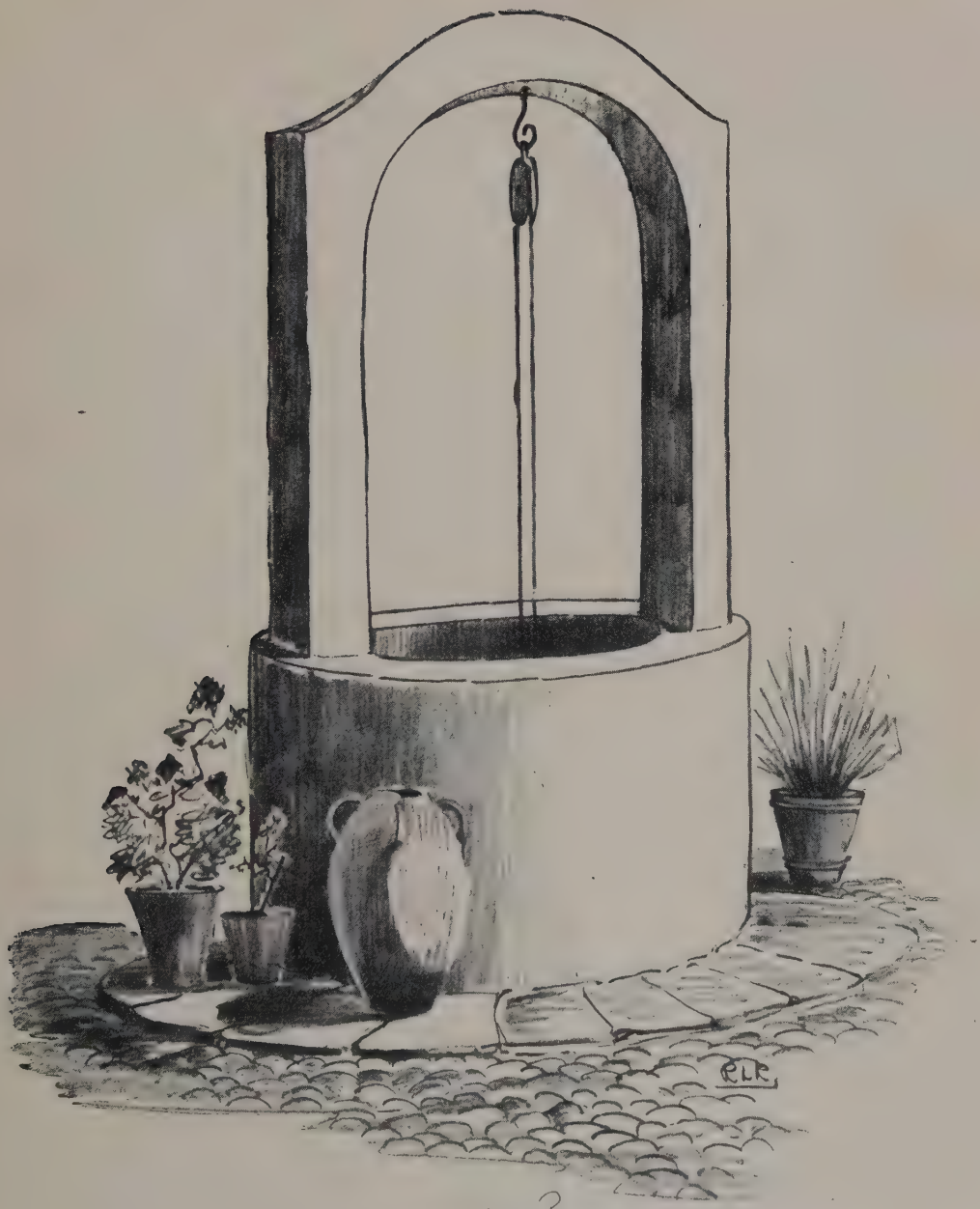
The Spanish garden teaches how to make the most of a small space, how many paths to have, how to place the few shrubs so that they will look like a luxuriant planting, and what the proportions of the accessories should be, and how many to use so as not to crowd the little enclosure.

In the small space there is room for only a few plants, and if these are well selected each in turn will make an unforgettable picture. In March the Judas tree (*Cercis siliquastrum*) scatters its lavender blossoms onto the tiled floor, then the Roses open their flowers, and later on the Crape Myrtle (*Lagerstroemia*) fills the patio with clouds of frilly pink blossoms, while in September the branches of the Pomegranate curve down with the weight of the heavy scarlet fruits as if stooping for some Persephone to pluck them. The small trees bring just enough shade and do not interfere with the flowers.

The Spanish gardens have been influenced by three types of patios: the mosque courtyard, the cloister patio, and the patio of the dwelling.

In Muslim countries the mosque courtyards are often shaded by a spreading Plane tree. They are not remote and isolated but full of life, the air is filled with the flitting of pigeons and the people come to the fountains to wash before each of the five prayers and at other times to drink the cool waters. The vendors lay their trays of breads or sweetmeats on the ground beside them while they lean against the wall and watch a letter writer taking down a message haltingly given to him by a homesick countryman to his people far off in the hills.

The mosque courtyard at Cordoba is planted with shiny-leaved Orange trees in rows and a few tall Palms. There are little circles around the trees connected by conduits to carry the irrigation waters from one tree to the next. The main entrance way is paved in pebbles in long stripes which the perspective narrows as they recede. There is a large rectangular basin into



WELL ?

WELL !

which the fountains spill their water and the women come there to fill their pitchers and gossip as they must have done thousands of years ago when the yard formed part of the Iberian and later the Roman temple grounds. The warm golden stone of the mosque and the courtyard walls enclose it, pierced by arches striped in yellow and red and finished off with a cresting. The simple planting is exactly right, because a more elaborate or varied selection of plants would detract from the beauty of the architectural setting and the perfect proportions of the whole, which are roughly 390 by 180 feet.

A garden whose chief glory is its frame of sculptured stone is possible in other lands. Instead of the temporary wooden porticoes and capitals the artisan can as easily work in durable stone. If this is too expensive, the garden frame can be of plastered walls molded into graceful arcades or of soft-toned brick laid up so as to make a pattern in Arabic fashion. The arches can be of any shape and period, the round Byzantine, clover-leaf Saracen, or pointed Gothic, and the columns and capitals should harmonize with them, according to the shape of the arch. One can have either classic capitals or the naturalistic forms of flowers and leaves or even amusing stories such as were carved onto the capitals in the Romanesque cloisters of the twelfth and thirteenth centuries, only instead of reproducing the old animal fables one can depict the athletics and industries of to-day in the lightninglike flashes of modernistic art.

The cloisters are smaller, more aloof, and closely resemble the *medersas* (ecclesiastical colleges) in and about Constantinople and elsewhere. Like most small Mediterranean gardens they are planted in a design of geometric beds outlined with Box. The cloisters could be adapted to out-of-door museums or concert halls. Where you sit in the starry night while listening to the music, you inhale the fragrance of flowers, and when your mind wanders, you glance at a marble statue in a green exedra; and ever

after the Beethoven symphony, the Apollo gleaming in the night, and the fruity smell of the Roses will be intertwined.

One cloister in a forgotten town with a glorious past reminded me of a city back yard, partly because it was so cosy with the caretaker washing the clothes in large green and blue pottery bowls and her children, like the cherubs in a Murillo painting, playing around the stone pillars.

The scheme of this little enclosure could be bodily transferred to an unpretentious garden. In the center is a raised rectangular bed with a retaining wall of brick not higher than fifteen inches and on this is a cistern. The bed is planted with Delphiniums and bordered with yellow Crocuses and Violets which all bloom together in the spring. There is a well in the corner shaded by a Peach tree and the other planting consists of a few Lilac bushes, a Mulberry and a Fig tree, while a Rose vine blushes against the carved stone arches. All the beds but the center one have lost their trim outlines, yet one can see that it was originally a formal garden, but in the bright perfection of its youth it could not have been nearly as lovely as in the gentle neglect of its old age.

Some of the cloister gardens are more austere with a greater sense of their nearness to the church.

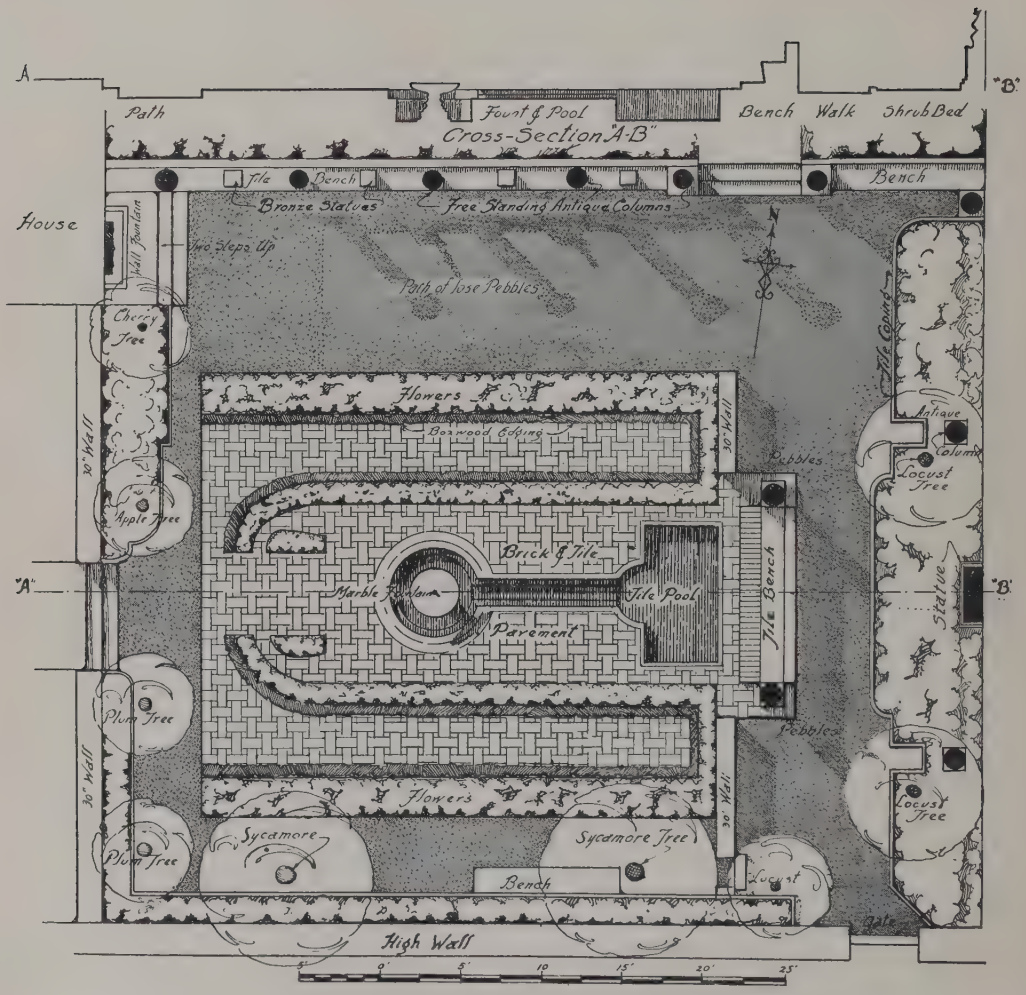
At Barcelona one comes from the darkened church into the golden green sunlight of the garden. This is planted with four beds of Aspidistra and Ivy from each of which rises a tall tree, two Palms diagonally opposite the two Magnolias. In these gardens the green vines caressing the richly carved arches of the mellow stones or a Fig tree ripening its purple fruit against the cloisters bring the living green of the present to the sculptural stones of the past.

When the cloister garden is large there may be a little house in the center, as in the one of Nuestra Señora de la Guadalupe. The cloisters are semi-

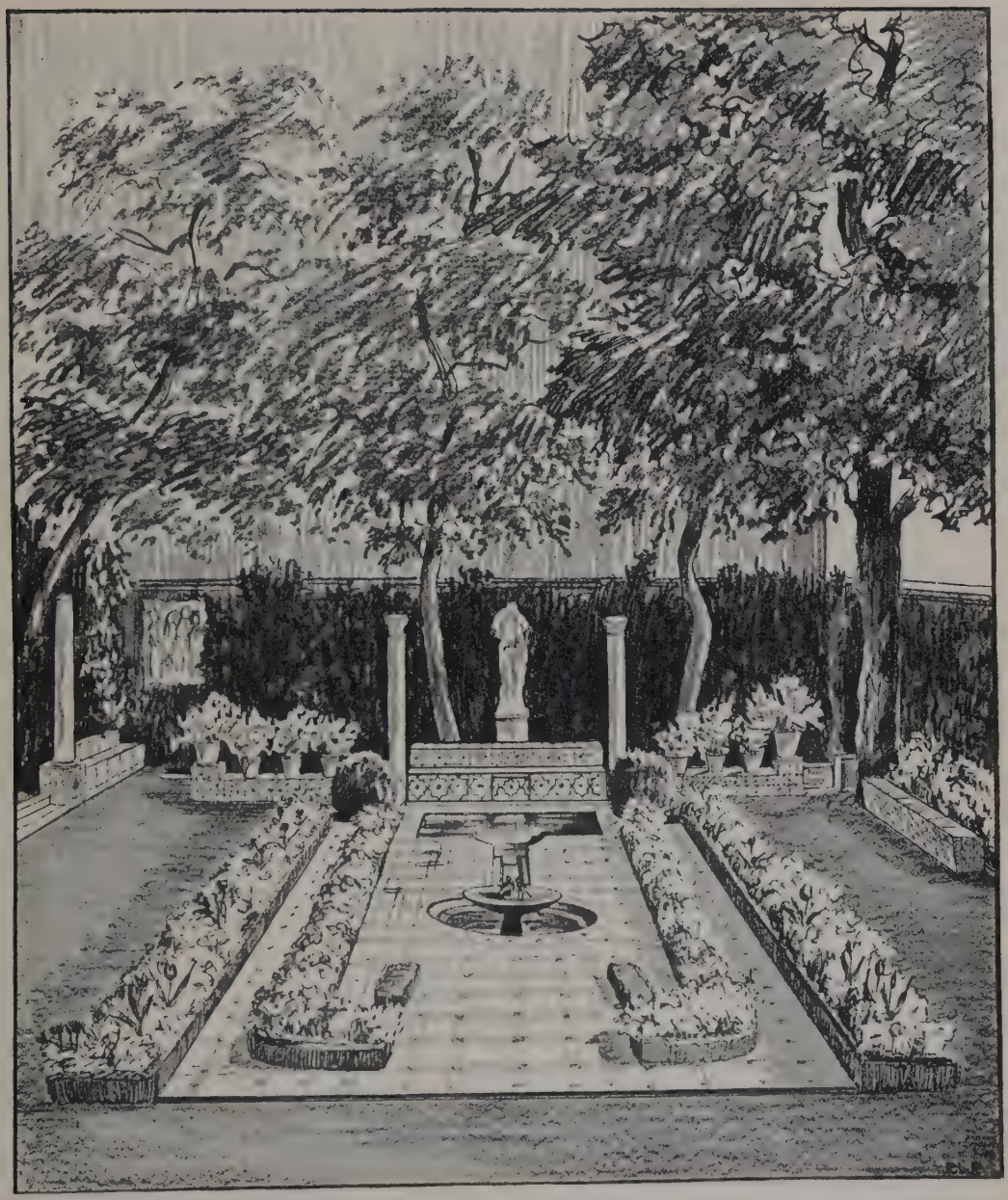
Gothic, semi-Arabic, one set of arches surmounting the other for three stories, all of them whitewashed. Two paths crossing at the steepled garden house divide the enclosure into four squares, each of which in turn has paths winding through it. The borders are of clipped Box as high as one's waist and so thick that the gardener has sunk pots of geraniums into them which show tufts of lighter green foliage above the dark hedge. There is an abundance of water and everything grows luxuriantly, the vines clamber over the hedges, and the flowers, like Dahlias, which dwindle in other parts of Spain, thrive here. The beds, when we were there in September, were filled with Roses, Phlox, Zinnias, Geraniums, Michaelmas Daisies, and Dahlias—quite a jumble; but as in all these gardens where the frame is so perfect, and thick Box outlines the beds, the flowers except as bright bits of color, are unimportant. The gardener, who is a portly monk with a blue apron worn over his brown habit, beamed at our praise of his fine gardening and then gallantly picked a Rose for each of us. There is a fountain under the garden house and in the corners there had been bronze basins with fountains with delicately wrought dragons' mouths for spouts, a little reminiscent of Gothic gargoyles. This delicious spot, so cool and green high up in the rocky mountains of Spain, with its courtly ecclesiastic gardener, is a place to remember when one is rushing madly and a little blindly from one useless errand to another in our too worldly lives.

The church with its cloisters is as familiar to the señora who daily dons her black veil to go to mass as her own patio, and undoubtedly she brings home and tries out ideas which she has seen in the cloisters and carries to them something new she has learned at home.

Most patios are in the center of the house which is built around them with the living rooms on the ground floor and the sleeping rooms opening on to the second-story balcony. There are, of course, many deviations from this rule and in some houses the family sleeps downstairs in summer and up-



PLAN OF PATIO OF GARDEN OF THE CASA SOROLLA, MADRID



Patio of Garden of the Casa Sorolla, Madrid

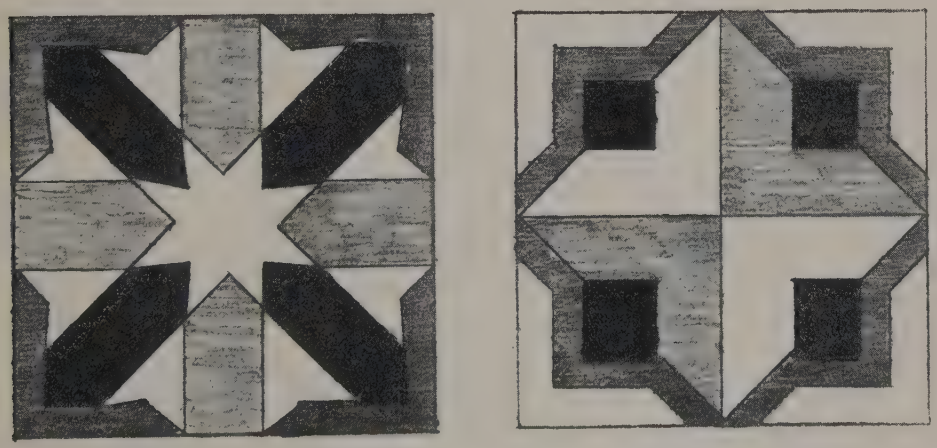
stairs in winter, while in the half-ruined old palaces one finds each story housing one or two families like an apartment house.

The second story may project over the first floor and be supported by wooden posts or marble columns in a post-and-lintel construction or by an arcade of calcimined stone or brick. In the older palaces the surfaces of the arcades were worked in carved *yeso* (plaster work) made hard and lasting. They were painted in bright colors and gilded, and the vaulted ceiling under the archway had carved and painted beams. Except in their original romantic setting we have outgrown our liking for this pierced fretwork, but with the same materials we can have designs more appropriate to our modern taste. Sometimes a railing of carved wood or wrought iron runs along the second story supported on posts. The portion of the patio under the balcony is shaded and may be the origin of the American veranda. Old California houses were built like this and had a wooden balcony running the whole length of the second story supported on wooden columns under which ran a walk. New homes are fashioned in this style so suitable to the climate. Instead of a walk under the balconies in some Spanish patios they have a pavement different in design from that in the rest of the patio. The walls under the balcony are either covered with tiles, painted murals, or whitewashed. Indoor furniture, placed here where it is protected from the rain, and even at times a piano bring the room right onto the rim of the garden.

The family industries all take place in the patios of the poor. Here the women do the washing, prepare the food, bathe the babies, and, when they are tired, sit down and mend the clothes. These patios are often as lovely or even lovelier than the more elaborate ones. The walls are plain stucco, whitewashed or painted, and surprise stairways turning corners form amusing lines and shadows. In the more skillfully planned homes the stairway from the first to the second story is recessed and built between the walls. It is usually small and decorated with polychrome tiled risers, plain tile treads, and a

wooden nosing. The pavement may be of brick or small stones, and except for the pots which hang on the walls and fill every available space the principal planting is generally a small tree, sometimes a slender Palm which lifts its feather-duster head way above the roof. Pots are piled around the base of the tree and sometimes shelves are built to hold them. When there is no room for a tree or perhaps not sufficient soil and the pool is off in a corner, the pots are placed in the center any way. If there is only one tree, a variety is chosen with evergreen leaves, lovely blossoms, and decorative fruits. Perhaps that is why the Lemon, Orange, and Pomegranate trees have been so popular down through the ages.

The patios of the rich are bigger as a rule, and the architectural setting, the tiles, and planting more elaborate than those of the simpler homes.



Tiles Patterned Like the Plan of a Patio from the Alcazar, Seville

The favorite ways of laying out the beds are either to have two diagonal paths starting at opposite corners of the patio garden cross each other in the center and so form four triangular beds; or to have four paths start from the center at right angles to each other and form four rectangular beds. Where the patio or garden is large enough each of these beds may be treated as a

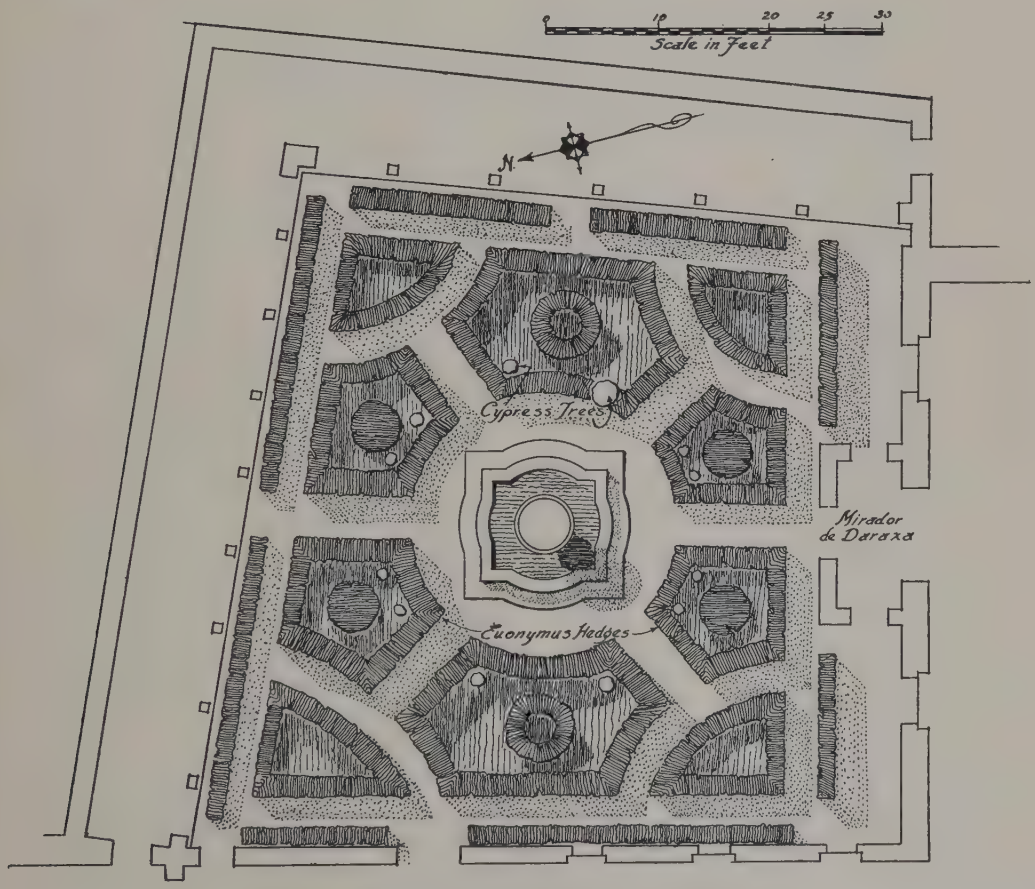
separate pattern and further subdivided. They may have both the right-angled and the perpendicular paths in the same patio garden, one set being more important than the other and paved in a different fashion so as to emphasize the design. In the center where paths cross is a wide, square, circular, or eight-sided opening and here is the pool or perhaps a little garden house.

One can take the pattern for these small gardens from a tile or a shawl and lay out the beds according to it. The paths are sanded, tiled, or paved in some characteristic fashion and the beds edged with tile, brick, or low-clipped Box and either planted with flowers or with a ground cover of Violets, Periwinkle (*Vinca minor*), English Ivy (*Hedera*), Japanese grass (*Carex morawi* or *Carex comano*), or the Mesembryanthemums. These last are clipped back to make them thick and green. Where the beds are sunken and have sloping sides, as I have seen in public gardens, they sometimes use one kind of ground cover for the sides and another for the base.

Tile Design Like the Plan of a Patio

In the small gardens which have lived through centuries of neglect to at last find care and appreciation, Box trees or Cypress turn up at the most unexpected places, out in the gravel walks or in the far corner of the flower bed, and if not allowed to spoil the pattern of the beds are charming, especially when the exact lines of the surrounding walls give the needed balance and order. These vagaries in an exact geometric garden are a pleasant surprise and cause one to wonder how they happened. So if it is appropriate or suitable to have a Cypress tight against an angle of the house or a flowering Peach leaning over the well, by all means have it even if it is quite off center and out of the balanced design.

Two famous patios are the Patio de Daraxa and the Patio de la Reja in the Alhambra, which are not purely Arabic but were changed by the Christian rulers to suit their needs. Each is characteristic of the treatment of patios and as they have had such a wide influence they will be described in detail.



Plan of the Patio de Daraxa, Alhambra

The walls of the Patio de la Reja are plastered and along one side is a double storied covered wooden gallery through which one sees the sky and distant landscape framed by the dark wooden balustrade and the grayish-

gold tiles on the roof. The patio is rectangular and paved with tiny pebbles in an interlacing ribbon design. The fountain is off center to be seen through the door from the adjoining patio. It has a fluted basin supported on a low column standing in a six-sided basin which is encircled by a tiny gutter to catch the overflow of water. Four old Cypresses are planted more or less exactly in each of the corners and except for pots standing on the steps or against the wall, that is all—all, but perfect of its kind.

The Patio de Daraxa has a formal plan of unequally sized beds adjusted to fit into the almost rhomboidal lines of the surrounding house walls. The paths of earth tamped down meet the doors and give the impression of being at right angles, but they are crooked, like sober seeming but inebriated gentlemen. The beds are edged with Box and some of the dark Cypresses are carelessly placed as if self-sown ages ago. The central basin of marble is circular with a fluted edge and the outside is carved in zigzag lines like the marks scratched on soft pottery with a tool or finger nail to cast reflections on the water in the pool below, for it, too, stands on a column which in turn is in a basin.

In many of the gardens there is no attempt at a special color scheme. But in others the paths, benches, and flowerpots all harmonize like the dress, hat, and shoes of a modishly gowned woman. In the old gardens, instead of being sharp and conspicuous, the colors of the accessories merge and supplement each other so perfectly as to be unnoticed.

In Spain, although they may set out to be stylish and have all the colors match, they do not always live up to the original intention in this land of mañana, and delightful deviations occur. But in more energetic climates, a color scheme, once undertaken, may last forever and become quite a bore.

The crisp and the subtle color arrangements are each good in the right place. For hotels, restaurants, or shops, assertive color schemes attract the

Fountain in the Patio de Daraxa, Alhambra

eye and suggest efficiency, but for a place where one intends to lounge and read and spend one's days, something less insistent is apt to wear better.

When the pots are glazed in bright colors or decorated with patterns they form brilliant spots of colors and with the tiles and walls are the important factors in the color scheme, the flowers being secondary.

The color schemes are so ingenious and often so subtle that for the future builder of a Spanish garden we have listed a few so he can either follow these or be stimulated by them to create original ones.

In a round garden cut out of the woods there were circular walls of clipped Pittosporum with white concrete posts to hold earth-colored pots of red Geraniums at the openings of the two entrances. Against the hedge four benches without backs curved to fit the shape of the garden. The benches were tiled in green, white, and black. There were Cedars in the center instead of the usual pool and the ground was sanded.

Another garden had walls of pinkish plaster and golden-green Myrtle hedges, green jars, tiled borders of black and white zigzag pattern on the paths, the rest of which were covered with golden sand and polychrome-tiled benches.

Soft yellow-plastered walls clothed with espalier Orange trees surrounded another garden. The benches were tiled with old polychrome tiles, the pavements were of earth-colored brick, and the pots were white with blue decorations and filled with fragrant green plants.

Earth-colored brick paths with blue inserts and edges of bright blue and white tiles, Box borders and Box in the flower beds, blue pots to alternate with white pots each filled with a little green Box tree, and walls of pinkish plaster was the arrangement of another garden. The blue could be substituted for yellow.

A restful arrangement consisted of snowy walls, earth-colored pots filled with grassy-leaved Bamboo, or Papyrus, columns and balconies of dark

brown wood oiled and waxed to a rich patina, Clematis against the walls, paths paved in earth-colored tiles, Box borders and other potted plants of Rose Geranium and Lemon Verbena, a white, gold (the pavement and roof tiles), brown, and green garden. The wood work in one such garden was painted dark green and grapevines were trained over the walls and ceilings of the loggia.

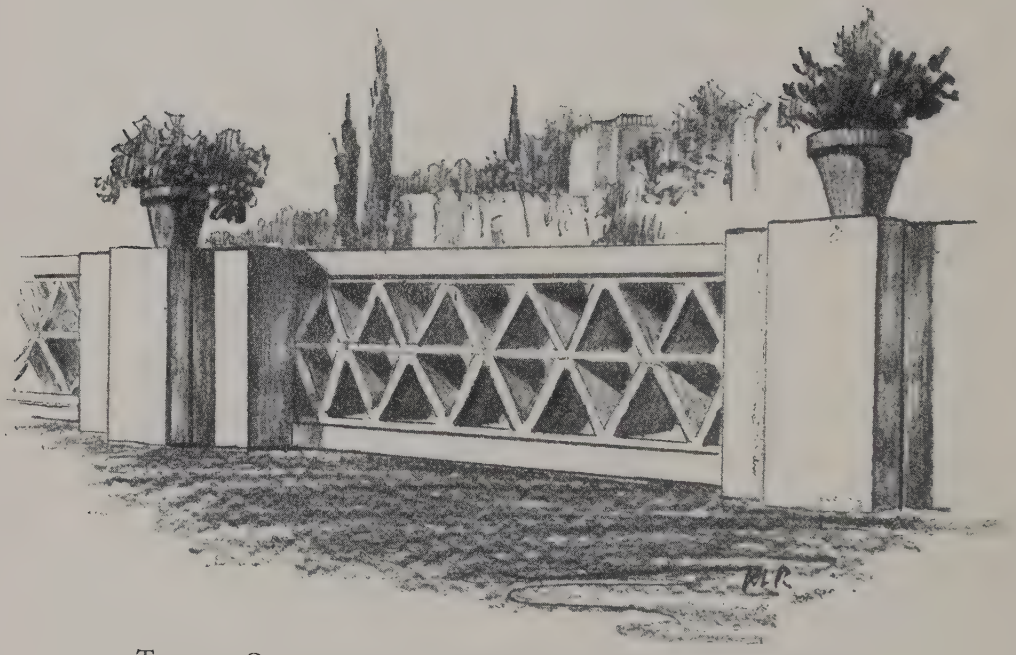
A striking combination was of white walls, dark blue roof tiles, dark blue pots filled with red Geraniums, orange and yellow Calendulas, earth-colored paths, and dark blue and white tiles in the pool.

White walls with yellow decorations, yellow pots filled with red Geraniums, and earth-colored walks make a dashing garden. *Muy española!* The same could be carried out in white and blue.

A garden with a water parterre which measures 25 by 80 feet over all had a marble fountain, the walks paved with pebbles in black and white, clay-colored flowerpots, and planting of Myrtle and Cypress.

The plan of these gardens is simple, the planting sparse, and the materials inexpensive so that they make excellent models for modest gardens in other lands. Many modern homes are built around a court having the wings of the house on two sides, a garage on the third, and perhaps an open space on the fourth. In such little enclosures or in a back or front yard we can adapt the Spanish ways of garden planning and be guided by them instead of struggling along in an attempt to solve each problem anew. They present the accumulated experience of the ages in gardening and we go to them as to wise old men, not to copy them but to learn fundamental principles, in color arrangements, in placing of accessories and choice of plants, materials, and above all how to make a little go its longest way—looking happy the while; for these little gardens with their tiled surfaces and potted plants against the deep blue of the Mediterranean skies are brimming over with the beauty and joy of life.

BEHIND MUTE WALLS



Tile and Concrete Wall at the Parque Montjuich, Barcelona

BEHIND MUTE WALLS

THE Spaniards, like the French, are fond of walls. They surround their gardens with walls as high as they can build them for shade and privacy. The walls, whether of whitewashed brick or of luscious green hedges, give a background to the garden and unite the separate features onto one canvas. Without a background, benches and pools, pots and shrubs stand out in space and have no connection with each other.

It is said that the Spanish way of building their houses to show mute walls to the street is an inheritance from the Arabs, that this was done to hide the home life, and jealously guard the women from the view of the passer-by. Where women are so unimportant that they are not even granted a soul, it is doubtful if they could affect the shape of the house. The Oriental made no display of his wealth. Instead he hid his riches, his silk rugs, gold and silver lamps, or jewel-incrusted furniture behind the blank surfaces of plastered walls so as not to tempt the cupidity of his rulers. The windows faced the cool patio instead of onto the hot street, and even to-day, in passing a house, except for the iron rejas and balconies and perhaps a finely wrought knocker on an iron-studded door, one has no idea of the beauty within.

In Spain the garden penetrates into the house and the house walls often enclose the garden on two or three sides. Both garden and house walls are roofed with tiles and painted the same colors and are so alike as to be indistinguishable from each other.

In the South of Spain the walls and houses are built of small stones covered with stucco or of brick and both are finished with a coat of whitewash. This type of building resembles the native Western adobe houses and is suitable for the treeless portions of our Southwest.

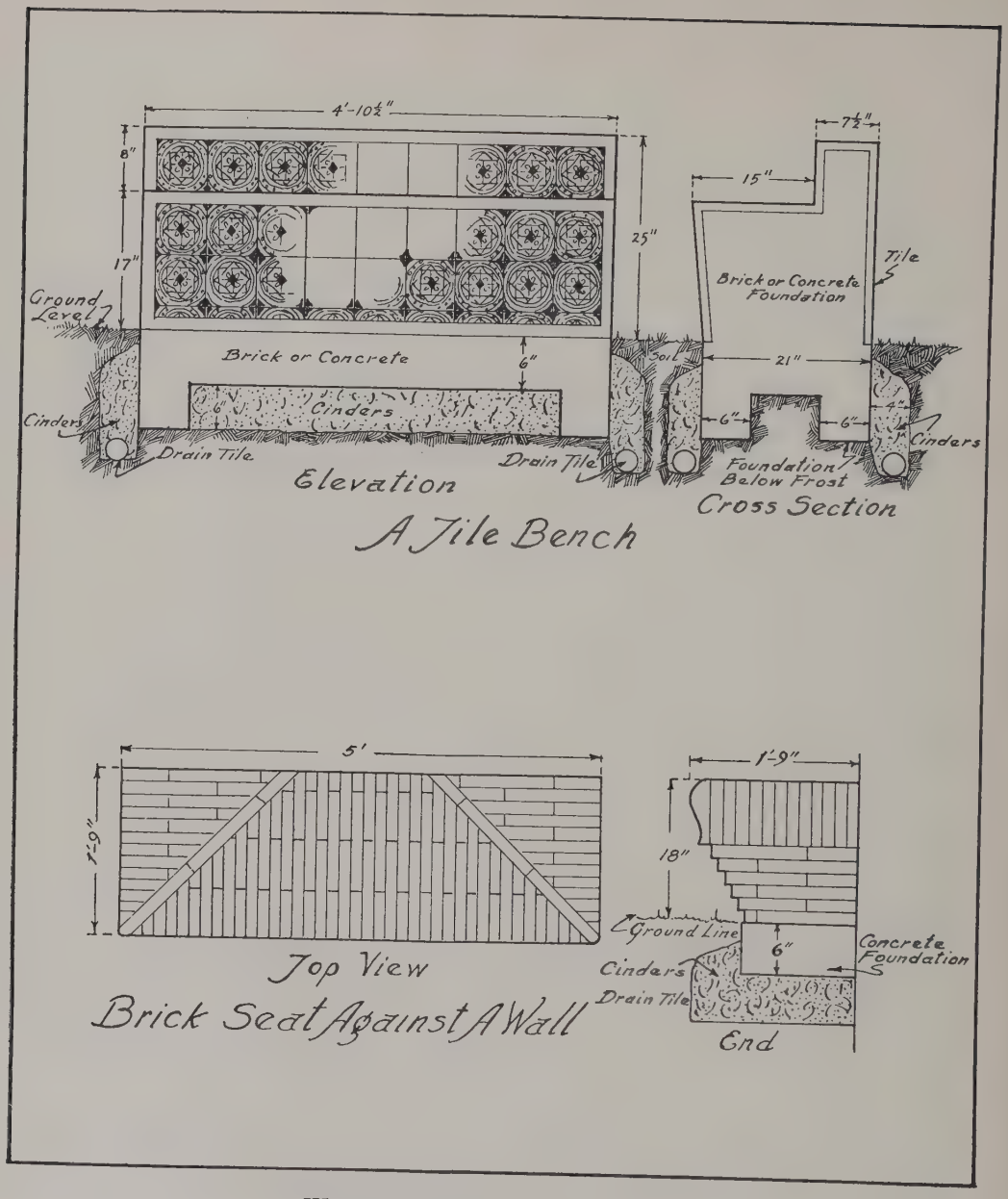
A garden wall, when it is of free-standing masonry, can be built twenty times as high as its thickness. This allows for quite high walls without much expense. The foundations should, of course, be carried below the frost line and must be at the least sixteen inches wider than the wall they carry. In Spain the garden walls vary in height from twelve to twenty-eight feet and often higher. If the walls are high, niches or arches cut into them give a visible gauge of their thickness and make them seem more secure. The niches can be used for benches or pots and the recesses for tiled panels. Statues do not belong in a typical Spanish garden, although if they look well in a particular place there is no reason for not using them, but more of this later.

In Spain the garden walls are surmounted with tiles to protect them from moisture, either with hollow roof tiles or flat ones laid on to form a triangular hood over the top. One never sees that horror, broken glass bottles, along the tops of the walls in Spain.

The roof tiles are made in every district in Spain, so that they are always the same color as the soil. Where there is no grass and the buildings rise from the bare earth, the earth-colored tiles draw the houses close to the ground and make them look as if they had grown up from the soil.

As the tiles are handmade they are never exact in finish or color and bright new ones patched onto dim old ones give further variations. The shaded coloring of the tiles and bricks on the roofs and walls gives a soft line which melts easily into the sky, whereas the factory-made tiles, all an even color and size, form a hard line against the horizon. The tiles used for roofing the walls and houses are the hollow Roman ones. They are not cemented onto the roof but fashioned with beveled edges and widen toward one end so that one fits tightly over the other like a tube. A flange extending out on either side covers the space between the ribs and renders the roof waterproof. The tiles are not always placed in even rows

Brick Bench, El Greco Garden, Toledo



WORKING DRAWINGS, TWO BENCHES

like heavily ribbed silk. Sometimes a row of wrong side up or convex tiles alternates with a row of right side up or concave ones, or a row of painted or glazed roof tiles will be placed diagonally or crisscross with unglazed ones to form designs. House leeks and moss clinging to the roofs give additional color and in spring self-sown Mustard sheds a golden mist over the housetops. I suppose some of my energetic compatriots, reading this, will try out new possibilities in annuals for roofs and in the near future we will see the ladies of the garden club meeting on the roof, carefully picking their way over the housetops to inspect the results.

In order to acquire the individualistic touch of handmade bricks and tiles for roofs and walls, those of us living in lands where building materials are made by machinery can use weathered old bricks from houses which are being demolished or the discards called "the run of the kiln."

The Spanish workmen are artists and care about having the tile or brick right for its niche so they are made in all imaginable shapes; curved, convex, concave, rectangular, and square.

The manager of a Spanish tile factory made a long trip especially to see a tiny inexpensive fountain I wished to have copied and spent three mornings on my meager order. He, my friends, and I, while his wife and children looked down from the gallery above and numerous attendants stood around suggesting and commenting, had the greatest fun fitting together a little pool and four benches from the separate pieces of tile lying about the wareroom which had formerly been a patio. Their patience and interest encourage creativeness.

In Spain one house joins on to the next so that it is hard to know where one begins and the other ends. Sometimes the houses in a village are all painted alike and in others a pink or green one stands beside a yellow one. One often sees the señora herself with a long-handled brush standing out in the roadway daubing her house snowy white or any color of the

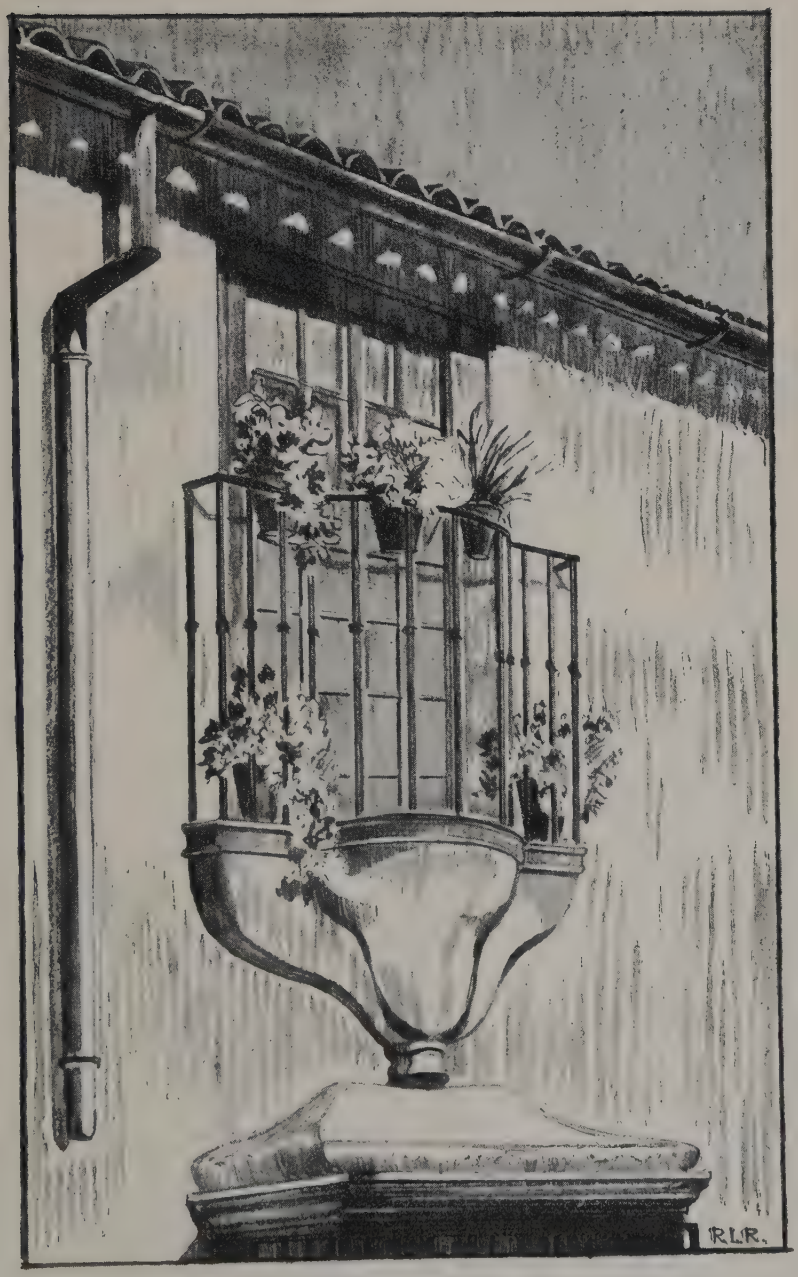
spectrum. The village streets with their colorful walls and flower-hung balconies look like the backdrop in a stage setting, as if they were waiting for the tempestuous Carmen to run out, fling a flower to her soldier lover, and sing him the provocative "Habañera."

Free-standing houses are more suitable to the needs of Americans. If these were connected by fences or low walls all made of like material they would be united and give a harmonious appearance to the street, especially where you find an English half-timbered house, a Georgian brick one Spanish stuccoed, and Colonial wooden residences each standing primly alone and all of them together looking like the rummage gathered from every age and climate in the world.

In Spain the walls are painted once or twice a year and this frequent daubing makes them chalky and silky to the touch. The colors are either finely powdered earth or other colors powdered and mixed with lime, water, and glue and sometimes a tiny bit of salt. The luminous effects are due to the painting of one color over another. The old shines through or tinges the new and gives a subtle texture which a thick application of a solid tone never has. Furthermore, the successive layers of paint carelessly applied give a rounded unevenness which catches the light and casts shadows.

Painted walls add color to the gardens already glowing with bright flowers and tiles. Unless they are bold and strong, the colors are absorbed in the blinding light of the atmosphere. Moreover, the golden light and the sharp purple shadows harmonize the colors and make it possible to have brilliant red, orange, and blue in peaceful harmony in the same small patio.

The fresher and cleaner the surfaces look in hot climates the more attractive they are. White garden walls rising from brown earth form attractive backgrounds for the shiny foliage of the Orange, Myrtle, or Oleander. Earth-colored walls of brick or tile not covered with calcimine repeat the colors of the dusty earth. Walls are painted in many fascinating



Balcony in Ronda

combinations. Oftenest they are white with decorations of another color. Sometimes a white house with white garden walls will have the window and door frames, shutters, pots, and balconies facing the garden painted orange with its motes of dancing sunlight, or blue the color of the Southern skies. In one rambling old residence there are three patios, each one with differently colored decorations on its white walls.

In Toledo, in a little patio entirely tented over with a spreading grapevine, the walls were painted a soft pink with a band of gray along the base. The delicate colors were just right for the twilight shade.

Where there is a tiled dado, white walls are quieter than colored ones. Sometimes a band of color is painted along the base of a white wall and in one village I saw this carried out all along the streets.

Black and white together were used by the Arabs and are crisp and chic when scantily applied. Shiny black pots are effective against white walls. In one patio they were used where a checkerboard pattern of black and white tiles had been let into the wall at the level of the eye to mark the top of an imaginary wainscoting. Green is the favorite color of the Oriental, and the more of it there is the cooler the garden looks, but it is best confined to the foliage, tiles, or accessories. Red and magenta when painted on walls look brown in the sun. There is a mellow, pinkish yellow stone used to build the cloisters in Southern France and the cathedral in Segovia which can be reproduced in paint, while a rosy buff and orange pink are good colors too.

Their favorite varieties of vines are Jasmine (*Bignonia*), Banksia Roses, Bougainvillea, Wisteria, and Blue Ipomea. They also use Trumpet Vines, Plumbago, Clematis, Passion flower (*Passiflora*), Virginia creeper (*Ampelopsis quinquefolia*), the newer Roses and the hundreds of others available in this climate. The vines are pruned so that their foliage is etched against the whitewashed walls and never completely hides them. The love-

liest of wall coverings are the Orange trees trained to form espaliers. Their glossy foliage is always green and their golden fruit hangs on from six to eight months while the fragrance of their waxy flowers is notorious.

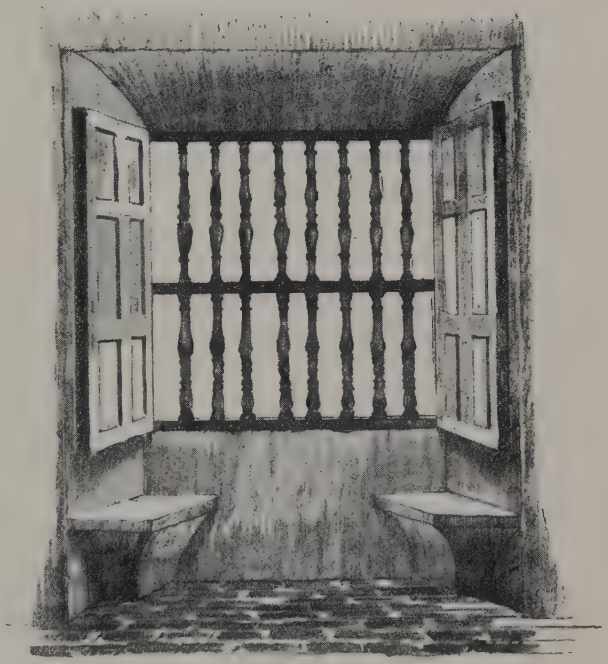
Instead of masonry walls there may be tall hedges of Oleander or Euonymus grown twelve to fifteen feet high, clipped to have perpendicular surfaces. Often a low hedge is planted in front of the higher one of another variety and directly behind the benches like a back to them. Monterey Cypresses (*Cupressus macrocarpa*) make bulgy golden green hedges and these are not as stiff as the clipped, broad-leaved bushes. They are held in place by wires. Doors are cut through these green walls for entrances, and sometimes, when the garden is in a wood, green corridors lead from one room garden to another made of Bamboo tied back by wires which are covered by the leaves and seem invisible.

At Avila, the crumbly walls of the Middle Ages show us what the fortified towns were like when the Cid and Bernardo del Carpio rode forth to fight the Moors. These old walls are built of horizontal layers of stone and brick, and to-day in the country, low walls used to fence the fields are still being built that way and they are attractive and different from the usual wall, all of one material. They use bands of loose rubble to alternate with rows of brick or tile set in cement to form the bond. The brick is stuccoed and the rubble exposed or, vice versa, the brick exposed and the rubble stuccoed. Gray stone is built in layers with golden or rose-colored tile, both exposed or stuccoed and the whole is sometimes finished by a band of cement and at others with tiles along the top. They can be easily copied in other lands. An amusing fence surrounding a modern country house has bright blue wooden pickets held down by posts of pinkish red bricks.

Garden walls often have windows to enable one to look from one garden into the next or out into the street. The views framed in these openings are like pictures hung against the walls. Seats are sometimes built under the

windows, and where the wall is thick there may be two seats built into it at right angles to the window so one can chat with a friend while looking out at the view.

These windows in the garden walls have wooden shutters either painted in bright colors, stained a dark umber, or left in their natural brown. Wood is a cosier and more familiar material than iron and cheaper, and is often preferred for balconies, doors, and shutters in informal houses. A weathered wooden door in the rich brown of its old age when hung at the entrance lends its storied past to the blank page of a new house. Old doors are not always procurable and handmade new ones showing the marks of the adze or gouge have a story of labor and thought to tell too. Oak, Cedar, Chestnut, and Cypress stand exposure without a protective coat of paint. Where the wood is cared for by oiling and waxing its natural color becomes glossier and richer, but where it is neglected and left to the elements it becomes streaked with silvery gray. The fruits and flowers look charming through the brown spindles of the door.



Window in Garden Wall, Generalife Gardens

One can grow lyrical over the iron balconies, doors, and window grilles of Spain. Iron was forged in Marseilles in Phœnician days when the metal was brought from Spain, where it seems they always knew how to work it.

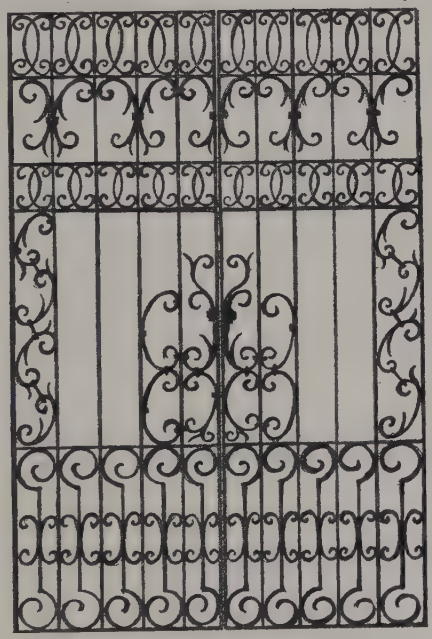
Later there was a secret process, now lost, of finishing the iron by giving it a high polish so that it would not rust without painting it. Iron was not used much by the Arabs, who preferred richer materials in their houses, but it came into fashion again after their decline. For doors and grilles the round bar is preferred to the square and often the plain bars are used alternately with the twisted ones. The old Spanish iron is made of thin, delicate lines and curves such as one would find in more precious metals. The wrought-iron doors of the sixteenth- and seventeenth-century palaces were like intricate lace curtains through which one glimpsed the patio and smelled its delicious fragrance.

Fine iron and bronze work is produced to-day in America, and the French are doing beautiful things with these metals in modernistic designs. It is best to choose the simplest designs with slender pieces of iron for the balconies, rejas, and doors, because thick, heavy lines with many curves and twists look coarse against the plain stuccoed walls and are out of scale with low buildings. The straight lines suit the old Spanish type of house and at the same time are in harmony with the direct go-to-it spirit of modern life.

The iron or wooden door is generally left open and one can see into the garden beyond, but sometimes it is closed and a minor Oriental song floating out into the street tells us there may be a patio on the other side of the high walls. Through the narrow, winding streets we follow the sound of the voice until we come close to it. When we lift the graceful hand of Fatima which forms the knocker and let it drop, the singing stops. There is a pattering of feet and the door is half opened. We ask to see the garden, not sure whether there is one at all. "Come right in and I will call the señor." We find a tangled garden of Fig and Plane trees rising from the casual flower beds at their feet and go out onto a terrace built on the semicircular

Wrought Iron Over Door
Ronda

Wrought Iron Over Doors
Seville

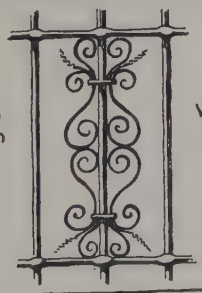


Wrought Iron Doors · Seville

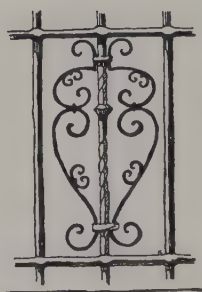
Door Knocker
Ronda

Door Knocker
Ronda

Motifs From
Wrought Iron



Window Grills
Ronda



Suggestions in Wrought Iron

machicoulis of the old ramparts facing upon the blue and amber landscape spread out beneath, for this is Segovia. Turning round we see the señor, who looks like a black-and-white engraving of an alchemist come to life. He shows us his garden, his telescope, and his study lined with books and we find we have accidentally stumbled onto Señor Castellarnau, the engineer who made the measurements for La Granja published in one of the two recent source books on Spanish gardens.

When the door from one garden into the next is off axis we look through its grilled opening onto the colorful flower beds and catch a glimpse of the spouting waters, but when it is on axis all one can see is the central walk and perhaps the Box edging on either side of it. In Arab houses the door was off in a corner as a precaution against a surprise attack. It was, however, kept there even in peaceful days, so that the visitor could not see the garden gradually as he approached but had first to open the door and come suddenly upon the resplendent scene.

If the gate is an important one it may have a hood projecting over it supported by iron brackets and roofed with shiny colored tiles. Gateposts at the entrance to properties are rare, as most of the gardens are small and in the cities, but at the threshold of the Generalife gardens there is an eighteenth-century entrance leading into a long avenue lined with towering Cypresses made of two stuccoed posts topped with simple vases appropriate for the Spanish type of garden.

When we think of Spain it is either of the smiling fields of the South or of the great Castilian plateau; we seldom hear of its wild mountains. At Granada the scenery is so superb as to vie in interest with the Alhambra. Here one can sit in the shade of the Palm or Banana trees and look at the snow-capped mountains brushing against the hot Southern skies. The Spaniards love their rugged mountains covered with Heather, Thyme, Rosemary, or with Cactus and Pine, and wherever it is physically possible

they perch their houses high up, facing the view with the gardens in a series of terraces one above the other.

The hillside gardens of Granada and Cordoba are the ideal gardens to them, so that they model all others after them. Monsieur Forestier told me every Spanish garden is a terraced garden with changing levels and stairways, whether it is on the flat banks of the Guadalquivir at Seville or in the streets of Madrid. Even in the patio the walk under the colonnade will be a few inches above the open space and the pool in the center will in turn be sunken a few inches deeper than this. Stepping down from the flower bed to the walk lends an amusing variety to a small, flat garden. Besides, the change in levels enables the water to flow from one part to the next.

When the house is actually built against a steep hillside, each floor may lead onto a different terrace, so tiny as to be like a big out-of-door anteroom as was done in the Greek houses climbing up the steep banks of the Bosporus and one wonders whether the Generalife gardens of Granada were not inspired by the Greek gardens on the Bosporus. One of these which might have served as a model was built on five terraces each planted in a different flower and design. In spring the basement level was filled with Roses which clambered over the wall; the drawing-room opened onto a terrace of lavender Primulas; at the threshold of the bedrooms was a garden of wild native Tulips; and the roof terrace was planted with Violets and Daffodils; while the fifth garden was above the house and had a little kiosk overlooking the swift waters below.

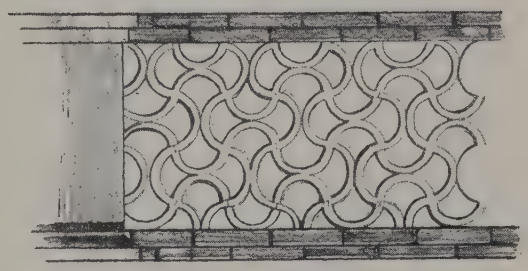
Around their hillside gardens where the world without is ugly the Spaniards have tall walls and high trees, but where the landscape is handsome they use low walls or break the tall ones with arcades and circular or square openings to look out onto the countryside.

A modern way of framing the view is shown in the gardens of Don Rodriguez de Acosta, of Granada, whose terrace walls of plain whitewashed

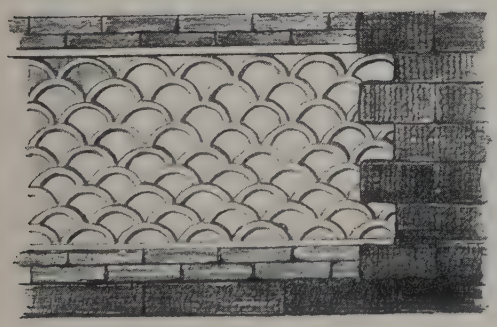
PASADENA JUNIOR

Entrance Gateway, Generalife Gardens, Granada

surfaces step up the hillside. From the darkened entrance hall one comes out on the terrace where all one sees at first is the blazing blue sky framed by white walls dazzling in the fierce glare of the South. No pretense of living in cool green shade here, but the bare, uncomfortable truth. The planting consists of vines, Cypress trees, and hedge plants. There are no branching trees to break up the great expanse of sky, nothing between man and the heavens above. A whole garden out in the glare would be unbearable, but one terrace or perhaps a portion of a terrace overlooking the mountains or sea could be left open to the sky as a place to sit and watch the stars grow bright in the deepening twilight.



Balustrade of Roof Tiles and Brick



Balustrade of Roof Tiles and Brick

Terrace walls are built of inexpensive materials in a simple fashion like the garden walls of brick or rubble coated with calcimine. They seldom have elaborate carved railings of stone or marble in Spain. Sometimes they build the walls of semicircular roof tiles, flat tiles, or brick laid on to form openwork patterns with concrete along the top to hold them in place. In a few gardens there are balusters of glazed and painted majolica which look a little gingerbready. Iron railings in simple lines are in scale with the small terraces and one sees the view through their slim silhouettes. They rarely have elaborate urns and vases on the tops of their railings, but may stand a line of unglazed pots, all exactly alike, along the rim of the wall.

To climb from one terrace to another there are modest stairways for the family's use and not the grand staircases of the French and Italian palaces along which kings staged their pageantlike receptions to foreign ambassadors. A favorite design is the double stairway, its two arms extending from a single platform. These two arms may bend and join again at the bottom or each continue alone. Often the stairway is off in a corner where it is not seen and one has the peaceful sense of being marooned on a little earthly paradise of fragrant flowers in Box-edged beds. An Ivy-covered wall behind shuts out the other terraces and before one is the view of snowy houses and church towers climbing up the hillside with only the splashing of the waters and the sounds of the tinkling donkey bells off in the distance to disturb the silence of the hot afternoon.

The handrail along the stairway may be of iron which is graceful and inconspicuous, or a whitewashed stone wall, or any of their types of walls.

In the fashioning of their stairways the Spanish show their characteristic originality. Their favorite materials are tile or brick, but they also use small pebbles and other stones. One staircase is built of long, thin bricks, like Roman ones but with rounded corners, set in cement quite far apart, the space being the same width as the brick. The treads may be paved with flat earth-colored tiles and the risers with polychrome tiles, or both treads and risers covered with earth-colored and polychrome tiles, combined to form a pattern which matches the scheme of the garden. In an old palace they have steps of concrete into which the heraldic device of the family had been pressed before the cement hardened. Any pattern could be used, and besides being ornamental keeps one from slipping on the surface when it is wet.

To be comfortable the riser should be half as high as the tread is broad, but in Spain they follow no set rules about this and have the ratio any size which fits into the space or proportions of the garden.

One stairway is built in three sections. In the center is a low, narrow flight

Stairway in Generalife Gardens, Granada

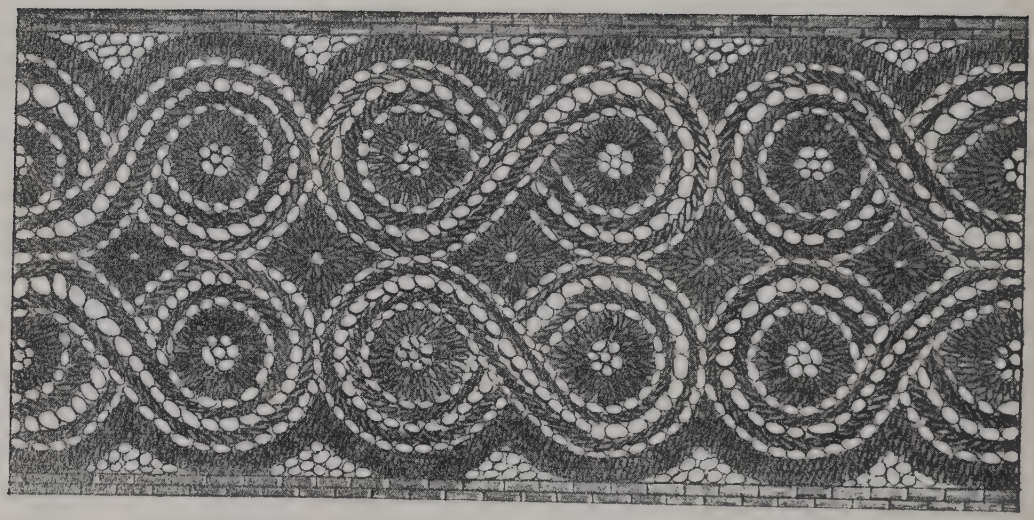
Steps and Seats in Patio of Alcazar Garden, Seville

of steps faced with tiles and enclosed with an iron railing and on either side are steep steps too high to walk on and merely used as places to hold pots. Another stairway is built along a high wall which is stepped in time to it and on each tread of the walls is a flowerpot. When steps are broad enough, pots are placed along the treads and on one broad flight of steps they had pots down the center to make it look narrower. In this happy land of Andalusia even the slight effort of climbing the stairs is eased by the refreshing smell of the Carnations or Lemon Verbenas in the pots along the side.

Where baby carriages or wheelbarrows are at home, ramps leading from one terrace to the next are more comfortable than steps. These are paved with tiny pebbles set to form a design, covered with pergolas and decorated with pots of flowers.

When you step down from the porch or terrace level into the garden, you shut out the clatter of the kitchen and the sputter and explosions of the garage. You come into a peaceful world of color and fragrance with no great stairways to suggest reaching up to higher levels, nothing to disturb the quiet isolation of the walled garden.

CERAMIC GARDENS



Pavement of Pebble Mosaic, Generalife Gardens

CERAMIC GARDENS

"Praise be to God! His is the Power! Thanks to God! His is the Majesty!
Durability is God's and there is no conqueror but God! Blessing."

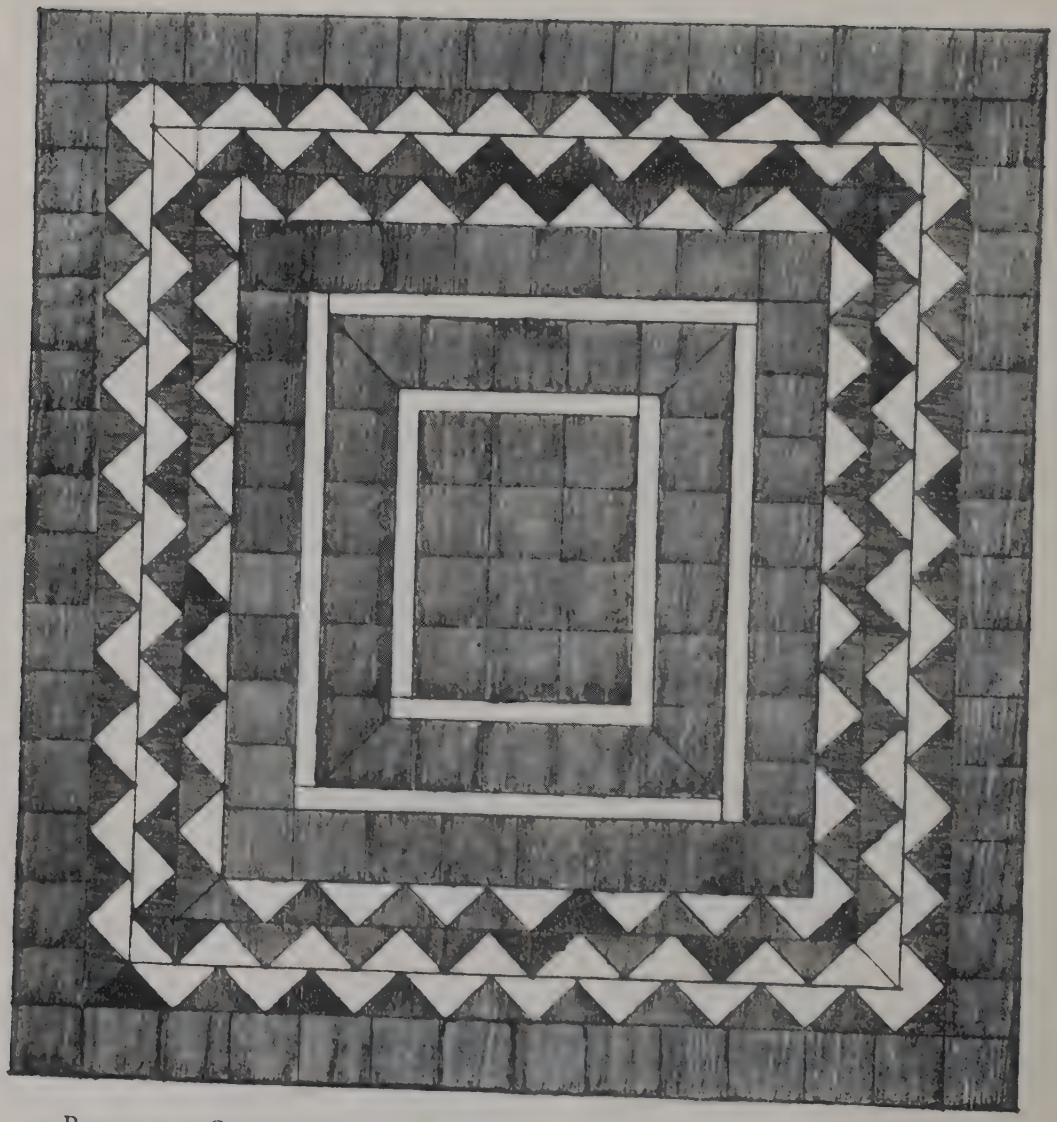
Written above the tiled dado in the Alhambra, translated by Goury and Jones

THE Spanish gardens are ceramic gardens. Blue, white, green, yellow, or earth-colored tiles line the pools and edge the flower beds, pave the paths and stairways, and face the concrete benches. Even the roofs of the houses and tops of the garden walls are finished off with tiles.

In Southern gardens or indoor make-believe gardens tiles furnish a delightful medium for finishing the surfaces and creating dashing color combinations along with the pots and plants. Unlike the flowers, no drought or disease can affect them and they are a permanent embellishment to the garden.

At the present writing no tiles have been made which, when laid flat on the ground for pavements or linings for pools, can withstand the Northern winter even when they are well protected. They will, however, come through a severe winter where they face a wall which sheds water. Where the winters are mild with only an occasional frost the tiles are covered with a thin coating of wax to protect them.

In Spain the only difference between the unglazed tile and brick is in the shape. They are both sunbaked and made of clay mixed with a little lime. The glazed tiles are colored and shiny and the unglazed ones have a dull, rough finish and are the color of the soil. The unglazed tiles are used most frequently in the Spanish gardens with the glazed and patterned ones as borders or medallions. Piquant effects are obtained by having the pool in the center of the garden green, yellow, or blue to match the inserts on the benches and paths. Sometimes polychrome tiles face the risers of stairways and cover



Pavement of Colored Tile and White Marble at Medina Az Zahra near Cordoba

Tiled Wellhead

entire benches. When these are soft they are like old tapestries, but when they are in garish colors, too many in a small space are distressing. With polychrome tiles it is safest to use few flowers and many green-foliage plants which will unite the colors and tone them down; for bright flowers, along with the colorful tiles, unless they are selected by an artist, bring too much movement into the garden.

Connoisseurs tell us that the tiled panels of the Alhambra and Alcazar made by Muslim workmen were very bright when they were new and that time has softened them. But from studying the juxtaposition of the colors in Oriental rugs I am inclined to think that even if the colors were brighter than they are to-day they were so cunningly blended that they glowed in rich harmonies instead of producing harsh effects. In the Alhambra at Granada the colors on one of the panels are yellow, violet, sky blue, black, and white; in another, yellow, green, and blue on a white ground (very soft); still another is carried out in gray, green, yellow, and dark blue on a white ground. But merely naming the colors gives no idea of their intermingling nor of the arresting designs.

For those who like to daydream under the dappled shade of the trees it is amusing to sit in a tiled garden and stare at a pattern repeating itself on the wall or pavement, see it change and follow its intricacies and wonder what it signifies.

The authorities tell us that there is no hidden meaning to the geometric designs of the Arabs and that they are purely decorative and for the present we must accept their dictum, but I feel that some of the patterns must have been mathematical symbols to express philosophic truths as yet undeciphered by archeologists. The Arabs did not copy or conventionalize flowers, human figures, or animals, but had the superb courage to base their designs entirely on geometric patterns and in this way they showed their love for abstract thought.

These abstract patterns are not cold and stiff, as might be expected, but are completely satisfying to the senses. They have a rhythm, too, for each is repeated and repeated and as you study one you find it dissolving into other patterns. You see one as long as your mind is able to concentrate and then you see the next and so on. In one pattern called "La Feuille de Nacre" (the mother-of-pearl leaf) according to Jean Gallotti in his book, "Le Jardin et La Maison Arabe," first you see eight pointed stars, then four pointed ones, then diamond shapes form themselves around the first star, and all of a sudden, as you keep on gazing, a new cruciform shape detaches itself from the design. One of the tile patterns called "Le Rakhoui" is a square-topped pyramid with stepped sides and was used by many primitive people. The American Indians weave it into their rugs and paint it on their pottery and to some of them it signifies mountains. It finishes off the walls of the mosque at Cordoba and in colored majolica is fastened to the tops of modern garden walls like decorative crenelations on the top of the wall in the frontispiece. Another pattern (used on the cover of this book) is the interlacing star which is drawn with ten, twelve, or sixteen points. It has an open circle in the center from which the lines radiate like the spokes of a wheel from the hub. They go out and then twist under and over each other in sharp angles and return to their starting place. To me this pattern suggests, "Dust thou art, and unto dust shalt thou return." No matter how complicated the figures, each line is mathematically related to the whole.

The designs of the tile mosaic were used in all Arabic work of the same period from Bagdad to Cordoba. They were carved onto the plaster or wooden ceilings, the doors and shutters, and repeated in the capitals of the slender columns supporting the arcades around the patio.

In Arab days the tile work was a mosaic. Tiny pieces of baked and colored clay were cut into different shapes and when pieced together formed the large patterns which covered the walls and paved the ground. The secrets of

the trade were so carefully guarded that they were not written down but taught by word of mouth from master to apprentice who had to memorize the patterns. When the Moors were exiled they took the knowledge of their

TILE MOSAIC

RENAISSANCE TILE

TILE MOSAIC

RENAISSANCE TILE

TILES FROM THE ALHAMBRA, GRANADA

crafts with them to Morocco, where they continued to make tiles in the same fashion as they had in Spain.

The new mosque just finished in Paris was built by Moroccan craftsmen, and the inside is faced with tiled mosaic. Here in the most sophisticated

of modern cities I saw a barelegged Muslim in his rough brown burnous practice the old craft as it has been done for centuries. First he slapped some wet cement on the wall and after smoothing it with his trowel he unerringly picked out piece after piece of the little tiles, some not an inch across, from the basket at his feet and set them into the wall.

After a while, instead of tile mosaic larger rectangular tiles were made which had either a whole figure or portion of the pattern painted on the surface. One type of these tiles as described by Leonard Williams in his book, "Arts and Crafts of Older Spain," was called the *cuerda secca* (dried cord). The pattern was pressed upon the tile from a wooden or metal mold so that the outline was in slight relief. This was then brushed over with a mixture of manganese and grease which turns nearly black in the baking and the body of the pattern was then filled in with various colors which were separated by the greasy line.

Another type of early tile was called the *cuenca* and here the pattern was stamped on the tile from a metal mold and remained in bas-relief so that they were known as *azulejos de relieve* (painted tiles in relief) and were used often for roofs and ceilings. Tiles are being made like this to-day in Spain and America. The next development was the "Pisano" tile, made about 1500. It was covered with a monochrome glaze painted upon and fired and was a flat, smooth tile. This type was in vogue until the eighteenth century and made possible the use of Renaissance patterns.

Tiles as well as jugs and plates were covered with a metallic glaze which gave a pearly or purplish iridescence, according to whether there was more silver or copper in the mixture. This was the famous Hispano-Moresque ware.

At Manesis near Valencia they still manufacture metallic luster ware but only with the coppery sheen. As you come into this pottery village you think you have fallen into Vulcan's workshop, for on both sides of the streets the

bright, shiny ware peeps through the windows and doors and spills over onto the pavement from the potteries within.

Luster tiles are being made in America. They are effective at night when they glitter in the dark and outline pools or paths. In the daytime, as inserts or borders on brick paths or benches, they lend novelty. However, if too many are used, the effect is spoiled.

Modern Spanish tiles reproduce the old geometric designs, such as the star or hexagon much elaborated, or they are decorated with a castle for Castile, a lion for Leon, or a pomegranate for Granada in several colors. The whole pattern is completed on the little square tiles measuring about 3 inches by 3 inches which are used as inserts with solid colors, or with unglazed tiles, bricks, or pebbles. Modern tiles come in all sizes from 1 inch by 4 inches to 8 inches by 10 inches. They turn corners, have straight or beveled edges, and form moldings; in fact, they are made in any shape required to fill the space. Besides these, scenes are copied representing the adventures of Don Quixote on tiles six inches square in yellows and greens. The figures from Goya's pictures and tapestries are also reproduced on the tiles and carried out in pastel colors.

In one garden the Goya tiles are used to cover the bottom of a fairly wide pool, the rest of which is lined with white, glazed tiles. In the center the water spouts from a little china dog in mustard yellow and white standing on an olive-green base. The concrete benches have inserts of the Goya tiles and the dainty garden with its eighteenth-century atmosphere is enclosed with high green hedges.

I have described the tiles in detail because if we know a little about them we will not be afraid to use them. Modern potters take something from each of the methods of the past. In America to-day we are making fine tiles and no doubt in time will have as original and amusing ceramics for our gardens as now come to us from Spain, North Africa, and Mexico.

Tiled Bench, Seville

Instead of Pomegranates and lions we could have California's famous Oranges, Pears, and Plums or Oregon Apples on our tiles, or native flowers such as the Dandelion (wouldn't its golden-rayed flowers be gorgeous?), the purple-rayed Aster with its golden heart, or a scarlet and bronze Maple or Sycamore leaf in its autumn coloring. The designs must be simple and bold.

The Arabs who had seen the tiled domes and minarets of Persian mosques glittering with turquoise and gold against the sky introduced the custom of tiling the whitewashed walls as high as a man's head. These tiled wainscotings protect the clothes from brushing off the whitewash. They are easy to keep clean and washing them cools off the patio. In the garden, instead of tiling a whole wall, the Spaniards set tiled panels behind benches and also place tiled pictures of saints in niches forming shrines—a ceramic version of the Russian ikon and just as gorgeous. They build a little tiled roof over these and swing an iron lamp in front of them to light up their jewel-like colors at night. The panels vary in height from 18 inches to several feet.

Wrought-iron Bracket and Lamp

They are sometimes copied from Murillo's pictures. A favorite subject to-day is La Maccarena (the Madonna of Seville). She is dressed in a white, green, or blue robe embroidered with gold and wears a long mantle of black and gold which flares out like a bell. Her high crown is gold studded with jewels and she stands against a background of warm buff surrounded by a border of bright blue festooned with yellow, orange, white, and green flowers, and fruits. San Paulo, San Jeronimo, and San Gregorio are pictured in panels, too, colored in brilliant blues, greens, and yellowish browns. In one house I

saw the panel of the Madonna set low into the wall next to the door, like a blind window over a shelf carrying polychrome pots of flowers.

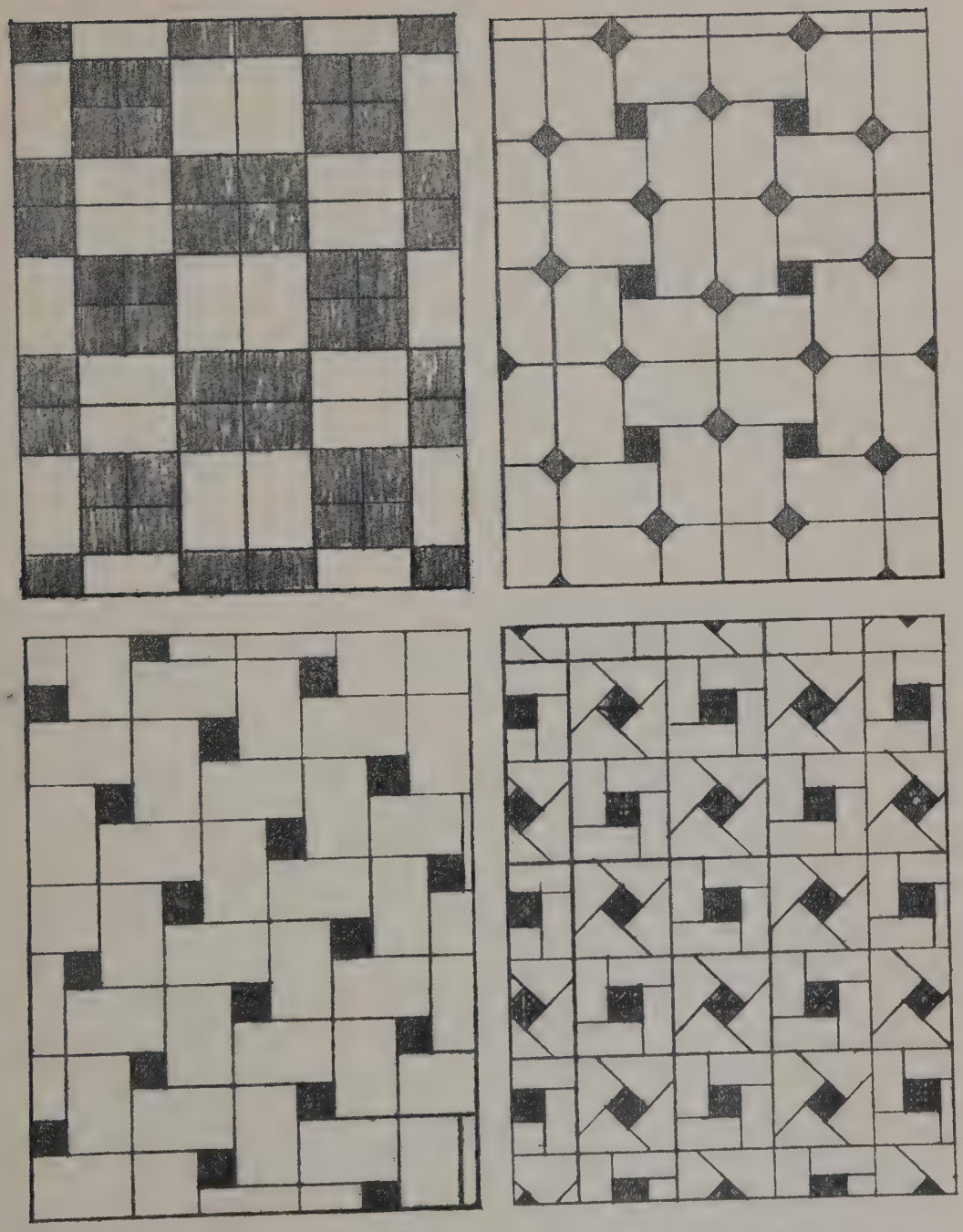
There is something delightfully pagan in all this color and sumptuousness in harmony with the brilliant blue sky, fragrant flowers, and glorious sunlight.

If we do not care for tiled pictures of saints on our garden walls we can follow the example of Daniel Zuloaga, who has painted the scenes of everyday life of his town on his tiles. He made panels in deep blue and amber showing men in their native costumes outlined against the arches of the Roman aqueduct at Segovia riding mule back or walking along the golden brown roads winding from the town onto the Castilian plain.

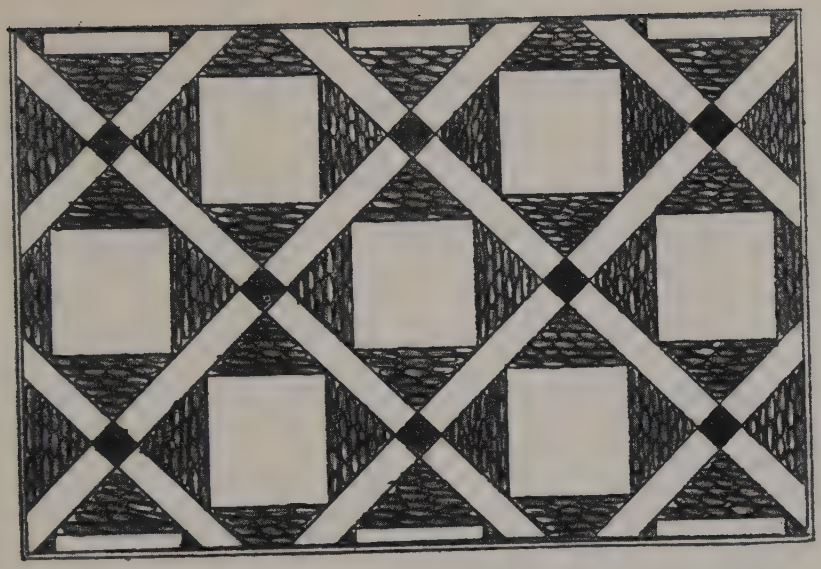
On the tiled panels in our modern patios and gardens we could have groups of cowboys, Indians dancing, Californian mission scenes, or the procession of prairie wagons creeping across the plains on the way to California in '49.

Besides covering floors and walls, tiles are used for signs and labels. Set high into the house wall they bear the names of the streets or have an arrow pointing the direction of the traffic, often "one way" on account of the narrow, winding roadway built in the Middle Ages and barely wide enough for one automobile. Automobile traffic is indicated by a low-swung touring car painted on the tile. One could have the name of one's country home let into the posts of an entrance gateway or the name of the garden, such as Lily Garden or Rose Garden, inserted into the garden walls.

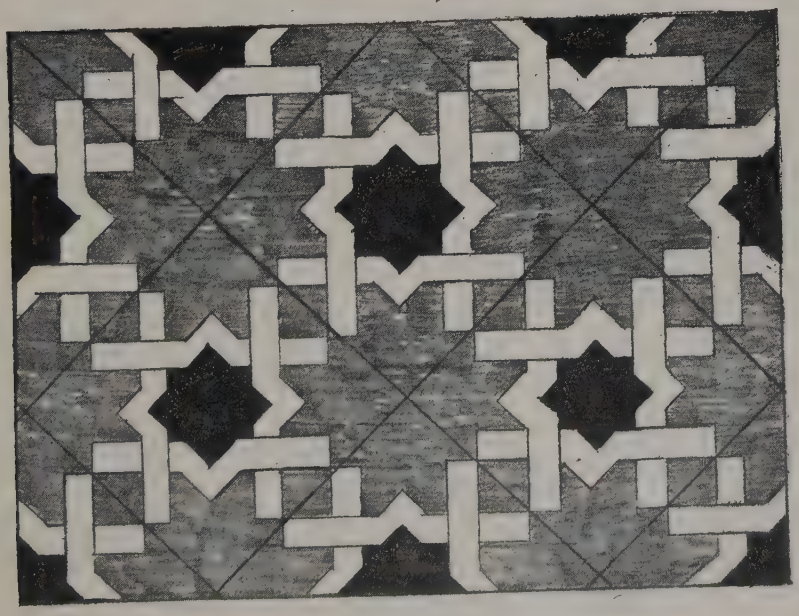
Where grass will not grow it is practical to pave the ground and walks with tiles or stones. There are days when the unpaved ground is sticky and wet from the rain or dried to an unpleasant dust by the sun. Paved walks dry off quickly and make it possible to go for a stroll immediately after they have been irrigated or wet with the beneficent rains. In Northern gardens



Glazed Tile and Brick Pavements from the Convent of San Isidro del Campo, Italica



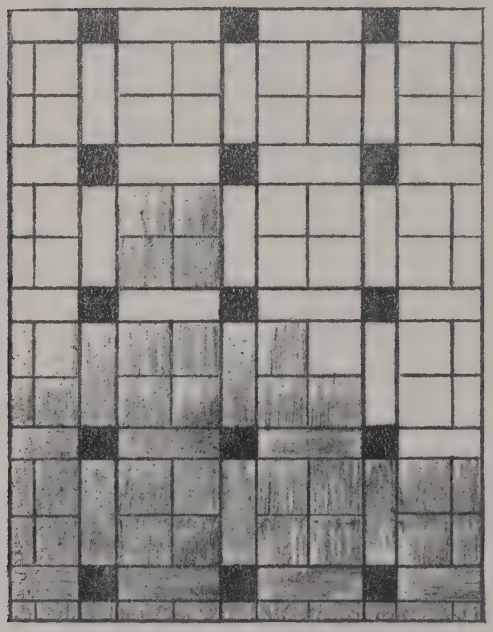
Pavement of Tile, Marble, and Pebbles, San Isidro del Campo



Tile Wall Design from the Alhambra

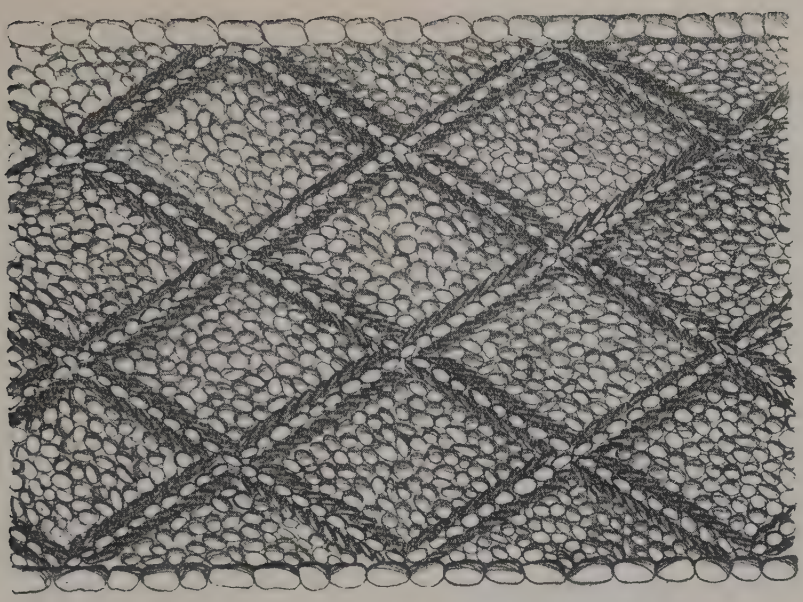
it is a good plan to have a strip of paved walk through the center of a grass path for this very reason. Where the soil is sandy the paving is not as important as where it is clayey. In Spain when the ground is not paved it is tamped down and sprinkled with colored earth, generally a gold-colored sand.

Although there are fine Roman mosaic and marble pavements in Spain they have had little influence on the modern ways of covering the ground. The paths and open spaces in the gardens are generally paved with tile or brick, which is attractive, cheap, and easily procurable. Small pebbles are used, too, and cobblestones—these last in the patios of the poor.

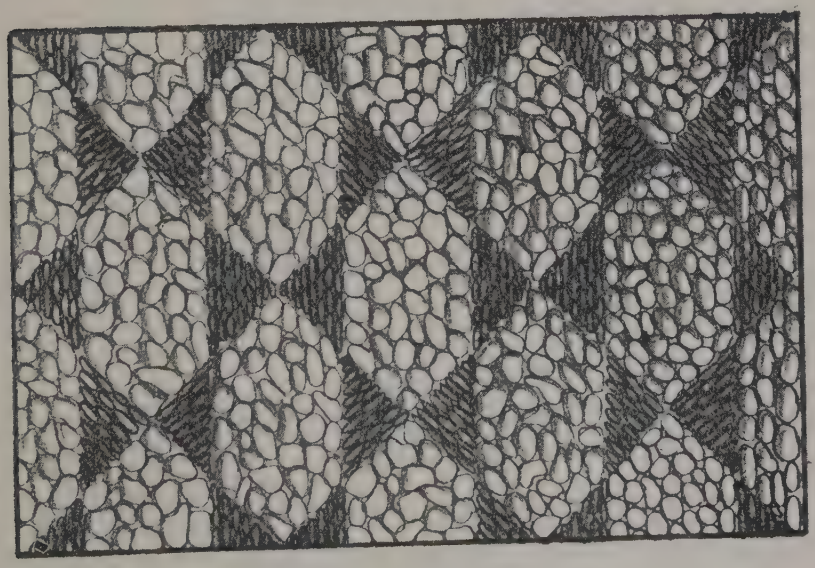


Pavement of Unglazed Tile with Colored Tile Inserts, San Isidro del Campo

In Spain the tile, pebble, brick, or marble pavements are set in a bed of cement mortar and the joints afterward grouted with cement. But elsewhere it is better to have a foundation of small stones under the cement to prevent sagging or heaving. The tile pavements, as has been said before, are made of unglazed tile with colored tiles as inserts and borders. The unglazed tiles make a most satisfactory medium for pavements and when they are emblazoned with colored medallions, or have polychrome inserts they produce a rich effect. Sometimes the tiled path or the sanded one may be bordered with tiles or bricks forming a saw-tooth edge or have borders of blue tiles to edge beds filled with pink



Pavement of River Pebbles, Water Garden, Generalife



Pavement of River Pebbles

Roses with Violets for a ground cover. Yellow Roses rising from blue Myrtle (*Vinca minor*) and edged with dark blue tiles is another possibility, as are blue and white tiles alternating as a border to an unglazed tiled path the beds of which are filled with green Box. The juxtaposition of the man-made tile with the fragrant living plant is a delightful contrast. Sometimes patterns are formed in the pavements from laying the tiles or bricks in basket weaves, herringbones, or other patterns, as is done in Northern gardens. Those immediately around the pools repeat its shape, but as they recede from the center they merge into the rectangular or circular outline of the garden.

Another material used for pavements are the small pebbles from the river beds smoothed and rounded from the action of the waters. The threshing floors dating from early days are paved with these pebbles and may have first suggested their use in gardens. They are gray, white, or bluish-purple in color. In convents and monasteries the white pebbles are said to be replaced with sheep's knuckles. The pavements in the Patio de Los Naranjos in the mosque courtyard at Cordoba are of pebbles in broad stripes of dark alternating with light. They harmonize with the marble stripes of red and white on the horseshoe arches surrounding the patio.

Pomegranates, initials, and heraldic devices written in dark pebbles on a white ground are not always in the best taste—conventional patterns are better; for the pavement is a background and the pattern on it should not be so striking as to rise up.

Monsieur Forestier has described pavements of concrete with patterns of brick crossing it to prevent the concrete from cracking.

With their vivid imaginations, the Spaniards have invented original combinations of tiles. The sculptor, Ben Liure, instead of rectangular tiles, has tiny irregularly shaped ones to carry out the fruit and flower designs bordering the white-tiled walks of his garden. They are in delicate colors and

form a modern version of the Roman mosaic. The uneven pieces were made to execute a naturalistic design, and each fits so neatly into the next that you do not notice its shape unless you look closely so as to note it down for a book on Spanish gardens.

In copying the idea of broken bits of tile one should not follow the bad example of the Catalonians. In this province of Northeastern Spain they pride themselves on their distinctive modern architecture, and they need never fear that any one will take it from them. They have used tiles as in a nightmare. They broke them to bits and threw these uneven and irregular morsels pell-mell onto the surface of their tortuous walls, with ridges like the wrinkles on an old face.

However at Sitges, a seaside resort on the Northeastern coast of Spain, there have been adventurous spirits who have used the modern tiles most effectively. Here the calcimined houses with their enameled roofs face upon a promenade running parallel to the deep blue sea. In front of them is a paseo like a fringe to the waters lined with tall slender Palms alternating with the brilliantly flowered Oleanders. The houses are Catalan somewhat like the French style and stand in the center of tiny gardens surrounded by fences. They bespeak their Spanish nationality through their tiled pools, painted shutters, and clusters of flowerpots. Brilliant colors flash in the sunlight from the shiny glazed roofs and the polychrome tiles on the window boxes and stair risers. It is so gay that it breathes the spirit of vacations, and fun. It makes you feel happy just to look at all this color and verve beside the sparkling sea where there is perfect bathing without any tide or crushing breakers.

Instead of the gloomy temporary sheds and shacks we live in during our vacations we, too, might enliven our resorts by painting the houses in bright colors and hanging out window boxes and colorful awnings.

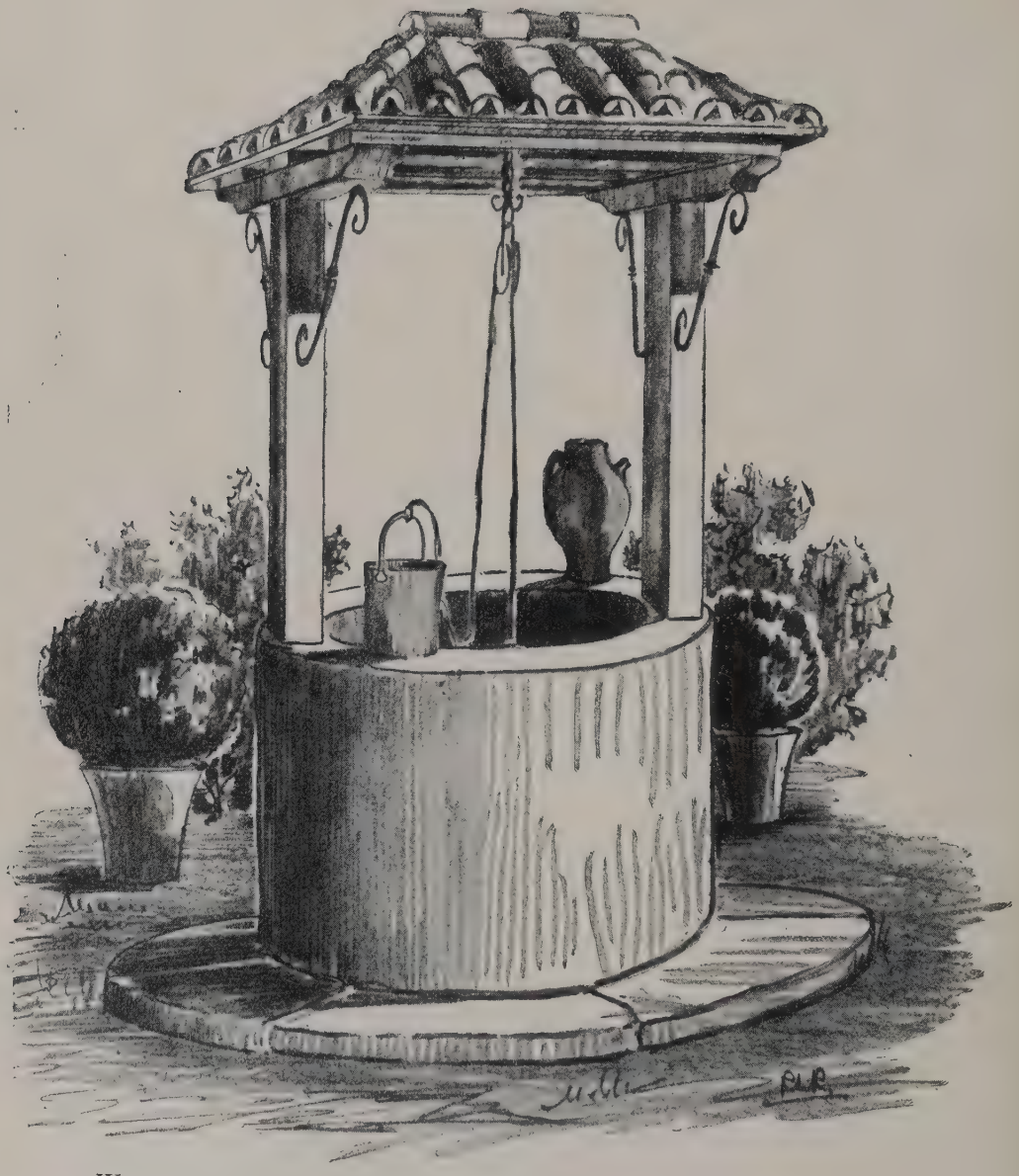
One rectangular front door garden at Sitges was paved with gray pebbles edged with sea blue tiles. In the center of the pebbled space was a

fountain of blue and white checked tiles and in the far corner against the house a chicken and bird house shaped like a triangle, the base having three faces. This was roofed with blue and white tiles in a large diamond pattern. The walls of the dwelling were gray stucco. The whole combination of gray pebbles, blue and white tile, gray stucco, and dark green foliage was cool and stimulating.

In arranging the tile scheme of the garden the most important factor to consider is whether the house is beside the blue sea, facing the golden desert, in a clearing of the green woods, or up on a city roof. The color of the atmosphere, the sky and trees around your home, determine the color of the tiles and the texture of the building materials. The ceramics must harmonize with the surroundings just as the planting should. If the house is beside a Southern sea, deep blue or violet tiles intensify the blues of sky and sea. Lighter blues and yellows are good for gardens on top of skyscrapers reaching into pallid skies; for deserts, brown and golden roof tiles and green or blue ones in the gardens will go well with the grayish green of the cacti and the amber of the sands; green or brownish red tiles are handsome under leafy green trees. Combinations which would clash in the gray, misty light of the North where the shadows are dim and uncertain are thrilling in the clear, bright light of the South where the shadows are bold and sharp.

Except for gas stations, subways, and bathrooms, the use of tile in the United States is only at the threshold of its possibilities. In time tiles will, no doubt, be used in the gardens of the South and West as they are in Spain. The tiles give us a new and vital texture to play with. They suit our modern ways, for they are efficient, clean, and crisp, and it seems possible to turn them out in quantity without impairing their beauty.

COOL, LIMPID WATERS



Wellhead of Whitewashed Brick with Wooden Posts Supporting a Roof of Glazed Tiles

COOL, LIMPID WATERS

If any one approach me complaining of thirst, he will receive cool and limpid water, sweet without admixture.

—From an inscription in the Conares Tower at the Alhambra.

ALL day long the thirsty garden is being watered, even during the hottest hours, when the parts under the shade of the trees are given their drink. As you come from the dust and glare of the streets into the garden, all is moist, green, and cool. The vines drape green curtains on the walls, the fountains are splashing, and from a hose a stream of water is gurgling around the roots of the trees. The clipped hedges are glistening and the pavements are wet and shiny.

The Spaniards' love for cool, limpid waters is said to be a legacy from their desert-dwelling ancestors, the Arabs, but any one who has been in Spain in summertime and seen the fields so parched that they crack open like lips blistered with the heat, will understand without any further explanation.

There is so little rain that, without irrigation, it would be impossible to have either gardens or crops except during the short spring. In similar climates elsewhere, the first consideration, in building a garden, is to insure a supply of the life-giving waters. There must be outlets conveniently placed for attaching the hose and for letting the water run into the flower beds and channels under the trees.

In Spain the water is stored in a pool or cistern at the highest point of the garden and distributed thence to the furthermost parts. If the garden is terraced, the water enters at the high level and is run, generally in open channels, to the next fountain lower down and so on. If, however, the garden is on level ground, a slight slope of one-eighth to one-quarter inch

in depth to one foot in length is sufficient to keep the water running down hill. This is the same amount of slope which is given to insure good drainage.

The sun is so rich in creating life that as soon as there is the least trickle of water there is fertility. The presence of water means lush crops and spreading trees; it is a sign of fruitfulness and plenty. That is why the Spaniards do not hide it in underground channels but display it in the open where they can enjoy its sparkle as it ripples in the sunlight and the sound of its cool tinkle. It is carried along the surface in narrow U-shaped canals two or three inches deep and four to six inches wide. In the palaces the runways are sunk into marble pavements, but elsewhere they are made of tile set in cement which is laid right on the ground.

Where there is a frost the tiles would have to be set in a concrete base of from four to six inches, which is, in turn, on a foundation of sand or gravel carried below the frost line. However, in cold countries, except in rare situations, tiled canals are not appropriate. Where it rains a good deal they are unnecessary and impractical, and, besides, look ugly all winter long under their wooden or straw coverings.

In the irrigated gardens the watering is done either by letting the water run into the furrows or canals around the trees, or by flooding the soil for several hours.

The irrigation has molded the surface of the garden and determined the levels. The flower beds are sunken below the walks sometimes as much as two feet. When it rains, the raised walks dry off quickly and the water runs down to the low level of the beds where it does most good. When the beds are flooded, the high sides act as dikes and prevent the water from spilling over and the deep furrows trenched into the soil carry it along from one row of plants to the next.

The trees and shrubs are planted in hollows cut out of the tiled pave-

Tiled Canals for Irrigating Trees on the Streets

ments. Trefoil or triangular openings, also quite deep and outlined with bricks or roof tiles, are made at the base of columns and posts for the vines. Out on the paseos and public streets, which are bordered with trees, each tree is encircled by a round or octagonal ditch connected with its neighbors by canals which carry the water from one to the next. Sometimes these canals are permanent and edged with tiles, but often they are dug before each watering. This is the better way, because the circle can be adjusted to the size of the tree, but more troublesome. The workman with a huge mattock lifts up the soil and after the water has run through the ditch for several hours he replaces it.

In addition to molding the surfaces, the water has given the garden its most important ornament in the form of a well, cistern, or pool. These wells and pools have taken the place of honor of the family altar and are surrounded with flowerpots like votive offerings. The object which contains the precious liquid was lovingly embellished with tiles or fashioned of the finest stone obtainable even when it was entirely utilitarian and supplied the water for washing and cooking as well as for moistening the garden. To-day the little pools with their dripping fountains are the crowning glory of every garden.

The wall encircling the well is about three feet high and either circular, six-, or eight-sided. Wells are found in old gardens and often in the patios of monasteries and are generally of whitewashed brick. But formerly they were tiled and had beautiful majolica rims called brocales made all in one piece. The pulley is attached to a wrought-iron frame with delicate scroll work. On page 88 is shown a picture of a wellhead with a wooden frame supporting a tiled roof.

Tiled and painted cisterns still exist in the old patios and gardens. They are not as pretty as the wells, because when their shape is rectangular they are a little like a sarcophagus with the lid off.

In Spain one sees small pools of many shapes and depths, flat on the ground or raised on pedestals. There is no end to their variety in size, form, and materials. The little ones range from eighteen inches to five or six feet in diameter and are surrounded with a gutter about four inches wide, also of tiles. Their rim rises from six to eighteen inches above the ground. They are in the center of the garden and often set into the pavement patterned in a gradually widening circle of design which sometimes continues to the boundaries of the patio. The water spouts up from the center and spills over into the little tiled gutter, thus keeping the rim wet and shiny. From the gutter it is led off in a tiled channel. Often the current is turned on full until it overflows to moisten the pavement and cool it off, a quieter and easier way of accomplishing the task than wetting it with a hose.

The pools are usually carried out in polychrome tiles. Their design is a geometric form such as a star, an octagon or hexagon, and elaborations of these and of circles and rectangles. Shell-shaped marble basins brought long ago from Byzantium have the translucency which the Greek workmen gave the stone by polishing it until it shone. Italian marble is often used too. Pools shaped like a conventionalized Sycamore leaf were copied from the Persians. This design is often found in the center of Persian rugs; for rugs were originally fashioned to imitate the garden and that is why they have a pool-like center, animals leaping across the flower-strewn fields and a series of borders simulating the walks under the arcades surrounding the enclosure.

Sometimes shallow little tiled pools are sunk at intervals in the center of a broad, tiled avenue, perhaps at the intersection of paths. Their rims rise only a few inches above the surface, so that they are not visible from a distance and you hear the water splashing into the basin without knowing where the sound comes from until you stand directly over them.

Great clay platters of Tunisian pottery or Spanish bowls of gray with

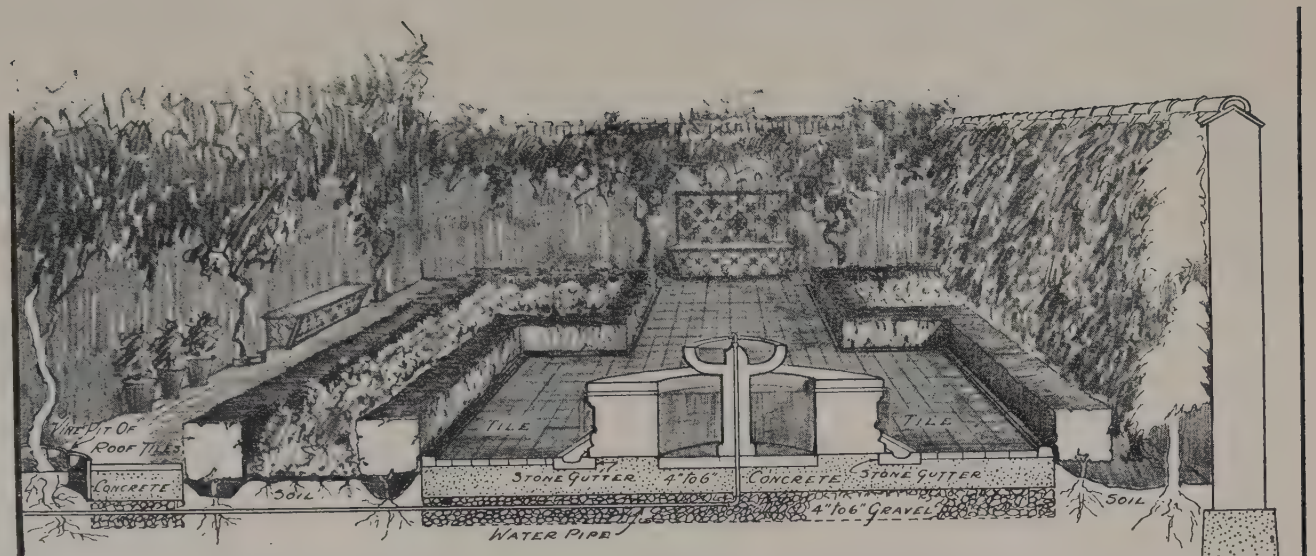


DIAGRAM SHOWING FOUNDATIONS
OF A PATIO GARDEN

green and blue decorations which are used for washing the clothes can be used as basins. They also make good bird baths, if sunk into the ground and filled daily with fresh water. It is better to bore a hole into them and run a pipe through this so that they can be filled with running water. Both birds and bees like fresh water and whenever there is a trickle, if it is only a leaky faucet, the bees quickly come and add their humming to the singing of the waters.

To construct the pools in Spain, the tiles are laid on a concrete base three to four inches thick. This is laid right on the ground as they do for the tiled canals and the same process could be followed in America if the ground is of hardpan. Elsewhere the ground where the pool is to be, is excavated for two or three feet and filled in first with broken stones set edgewise, then smaller stones, and lastly cinders or sand. On top of this comes the concrete foundation from four to six inches deep. This is then leveled and the tiled pool set down on it. The tiles are, of course, held together with cement. Before setting them up the tiles are soaked in water for twenty-four hours so that they will swell to their furthest capacity and not do this after they are set in concrete and so perhaps crack.

In Mexico, where there are Arabic gardens, the rim of the pool, instead of projecting only a few inches above the ground, extended up several feet to protect the ladies from accidentally dipping their flaring hoop skirts into them.

Pools are not always on the ground but often raised on stone or marble pedestals. One of these basins stands two feet seven inches from the ground to the rim of the basin which is four feet across. Another pedestal is four feet high, and the basin three feet eight inches across. The pedestal may stand in a depression in the pavement of from two to three inches. Then the water spilling over the edge of the basin falls into the hollow with a splash, and is carried off in the little canals, and not one drop is wasted.

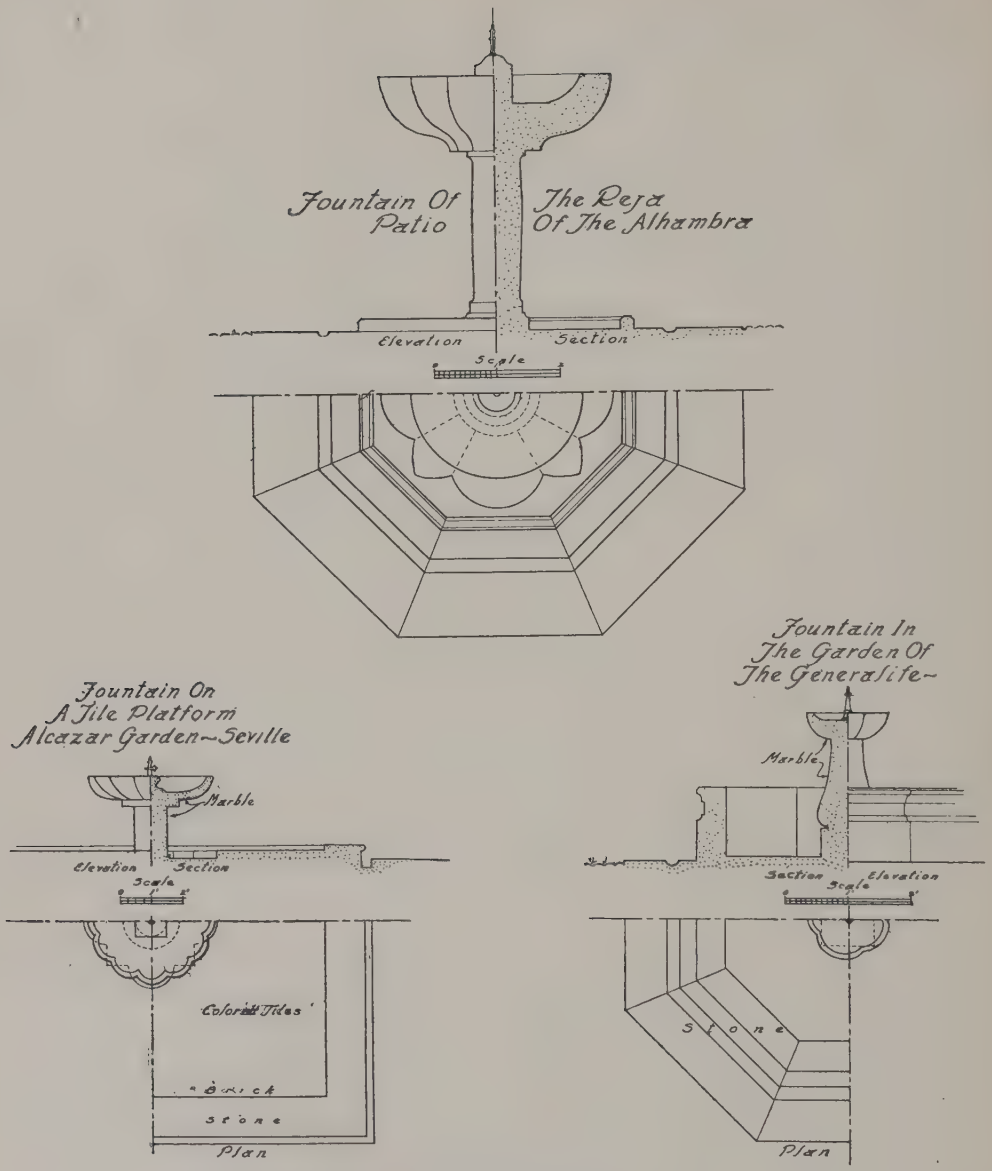
The basins of stone or marble often have fluted rims or are carved on the outside to catch the light and cast reflections onto the water.

The material of the garden pools should fit in with the surroundings. A simple porcelain dish would hardly go with a marble setting, but a gleaming marble basin, if it is the right size, will grace any garden. I have seen marble basins where they were the only elegant object in the patio and attracted the eye at once. If we cannot find a mellowed old marble shell or a shiny white new one in which to have our water sparkle, we can use bronze or pottery.

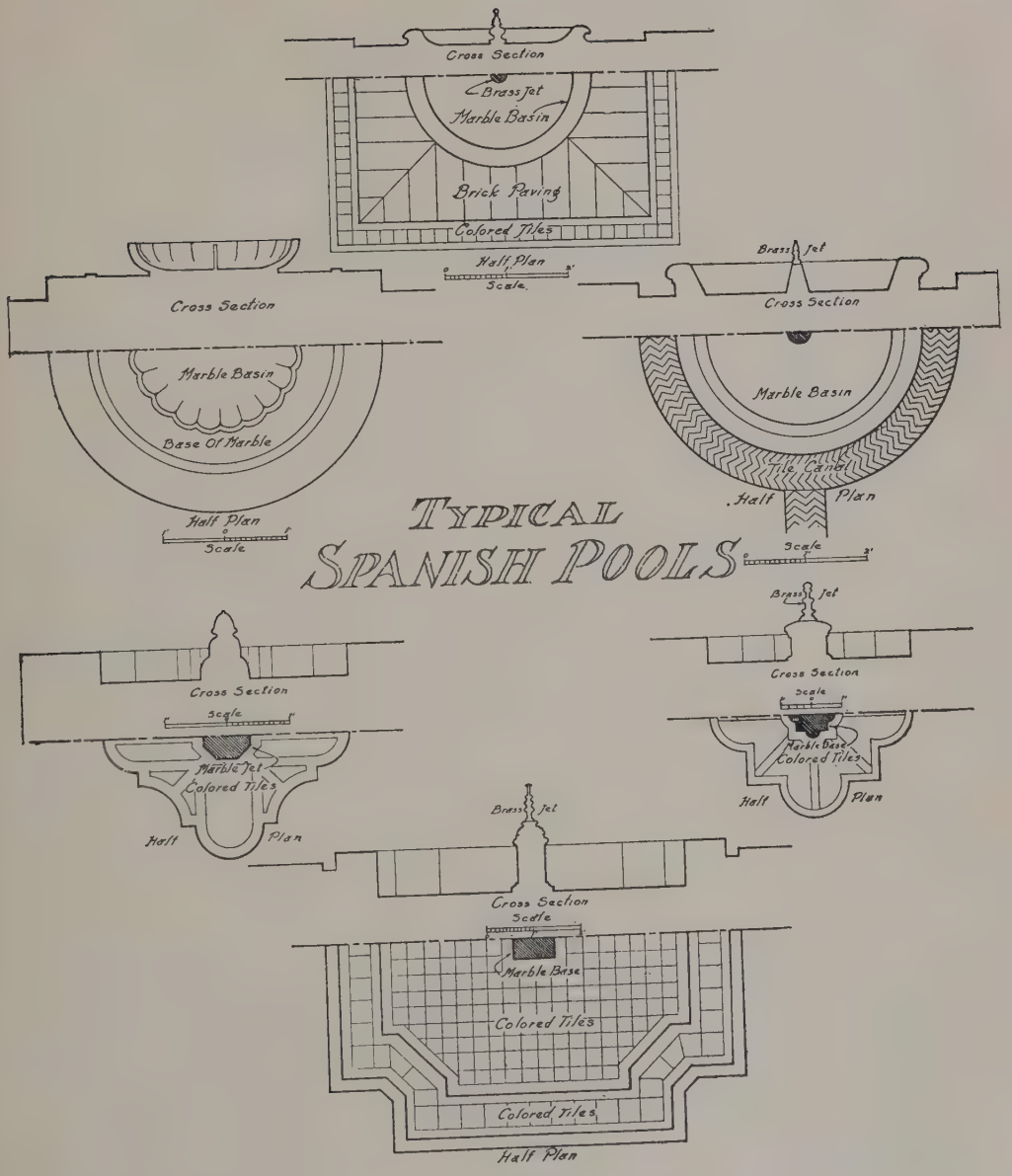
In the palace of Medina Az Zahra there were fountains which delighted the Arabs of that day. The description of one of these which was imported from Syria is quoted by Al Makkari. It was small and of green marble and seems to have "been a real wonder of art," for it had twelve figures fixed upon it made of red gold set with pearls and other precious stones. "The figures which were all made in the arsenal of Cordoba represented various animals; as, for instance, one was the likeness of a lion, having on one side an antelope, and on the other a crocodile; opposite stood an eagle and a dragon; and on the two wings of the group a pigeon, a falcon, a peacock, a hen, a cock, a kite, and a vulture; they were, moreover, all ornamented with jewels and the water poured out from their mouths."

Here in one courtyard they filled the fountains with quicksilver to get an effect of action and sparkle. This would seem a good suggestion for filling fountains which stand in entrance halls of cinema houses, restaurants, or conservatories during the winter when the cool tinkle of the dripping waters sends a chill down one's spine.

Fountains are built into the walls of patios and on the walls of the garden as well. In one patio the water pours out from a tiled panel and tumbles into the basin beneath. To be true to Oriental custom the basin must

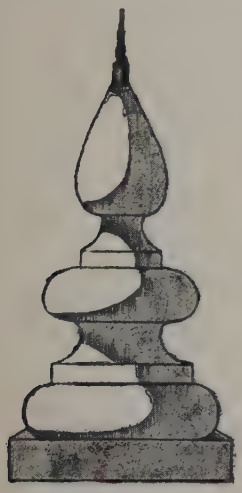


THREE SMALL FOUNTAINS AND BASINS


Cross Section
Brass Jet
Marble Basin
Brick Paving
Colored Tiles
Half Plan
Scale
Cross Section
Brass Jet
Cross Section
Marble Basin
Base Of Marble
Marble Basin
Half Plan
Scale
Half Plan
Scale
TYPICAL
SPANISH POOLS
Brass Jet
Cross Section
Scale
Cross Section
Scale
Marble Jet
Colored Tiles
Marble Base
Colored Tiles
Half Plan
Half Plan
Brass Jet
Cross Section
Scale
Marble Base
Colored Tiles
Colored Tiles
Half Plan

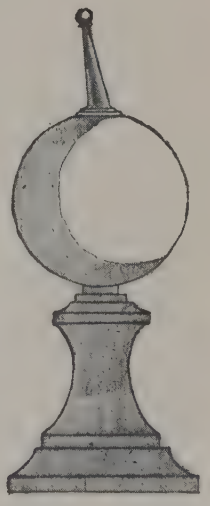
be without a stopper, for the Prophet commanded that water must be constantly running to prevent it from becoming stagnant and breeding mosquitoes and other pests. There are wall fountains in Constantinople where the water falls from one of several shell-like cups set against the wall to another until it finally reaches the pool at the bottom. In a California garden I saw a fountain like this and each little cup formed a bath for the birds who revelled in them.

China Dog Fountain, Parque Maria Louisa, Seville



Bronze and Marble Waterspout

In some wall fountains, lions' heads are the spouts. Either the head or the whole animal is used in free-standing pools as well. Sometimes a porcelain frog, or a fish or china dog, standing on the rim shoots out a streamlet of water in a parabola. In Spain they make these animals in all sizes and colors to match the colors and dimensions of the pools. Bronze waterspouts are popular too. They may be merely the bronze end of a pipe extending a few inches above the level of the water or a vessel twelve inches high elaborately wrought in a Renaissance design. One Arabic spout is a bronze ball with a slanting point affixed to it from which the water flows. The spouts send the water straight to heaven when placed in the center of the pool, but on its rim they are slanted to lift a high streamlet which splashes down into the basin.



Bronze and Marble Waterspout

In Cordoba in the tenth century the water was emptied into a reservoir through the body of a colossal lion which, as

Al Makkari says, was "so beautifully imitated that the sight of it only was sufficient to cast fear into the hearts of the beholders . . . it was covered with purest gold and its eyes were two jewels of inestimable value which sent forth torrents of light." The luxuriant might imitate these jeweled heads and bodies for spouts on swimming pools, but for those with simpler tastes there are bronze or majolica heads. In a modern garden in France I saw slim, angular statues of gilded bronze used as fountains. They would be effective against blue tiles.

The Arabs caused the waters to sing and ripple and even played jokes with them. In the Generalife gardens at Granada there are hidden spouts to send forth little streams and besprinkle the unsuspecting guests, when turned on from a concealed stopper.

Southerners cherish water for quenching their thirst, and also for refreshing their spirits. It is music to them to hear it drip, ripple over pebbles, or rumble in hollow-resounding tiles. They like to see the rainbows shimmering through a mist of spray or watch the waters curve up from a jet in an arc of shining silver balls.

It is as fascinating for the dwellers in hot climates to watch the sunlight dancing on the water in a garden pool as it is for the Northerner to watch the hissing, crackling tongues of flame eat up the logs on the hearth.

The size of the drop is controlled by the width of the opening in the spout and the sound of the splash is regulated by the height from which the water falls and the number of jets spouting at the same time. When the force of the water is strong the jet rises higher and when the water is turned low it merely trickles out. Any one who has watered his garden with a hose when the nozzle is missing knows how to make it change its shape and volume by shifting the size of the opening. Water falling on a shallow basin has a higher note than when falling on deep water.

In the Generalife gardens the water system is almost as it was when first

The Water Stairway, Generalife Gardens

constructed. It is perhaps the only garden in Europe where the waters sing and drip as they did in the Persian gardens of Ispahan. The water is led from one level to the next. It enters with a feeble trickle in a little basin on the topmost terrace and from here it slides coolingly down the tops of the balustrades on either side of the stairway. The balustrades are made of brick plastered over and have concave roof tiles cemented along the top which hold the water. As the balustrades curve around the circular landings the water swirls and looks fuller and mightier in volume. At the end of the balustrades the water does not form cascades but is piped into a grotto and makes a resounding noise against the overhanging roof; and from here it is led out into the water parterre where its mirror-like surfaces replace the flowers. It leaves the garden in a swift stream bubbling along in the sun.

There are no waterfalls or cascades in these little gardens. Rushing in great volume means an abundance of water and this they never have. The Spaniards are adept engineers in using very little water to the greatest effect, like prudent housewives with a small allowance. In Granada the water coming from the mountains starts in the gardens at the top of the hill and goes from there to those lower and lower down and finally, after a decorative beginning on the heights, ends in a career of service by irrigating the vegetable gardens in the *vega* (valley) below.

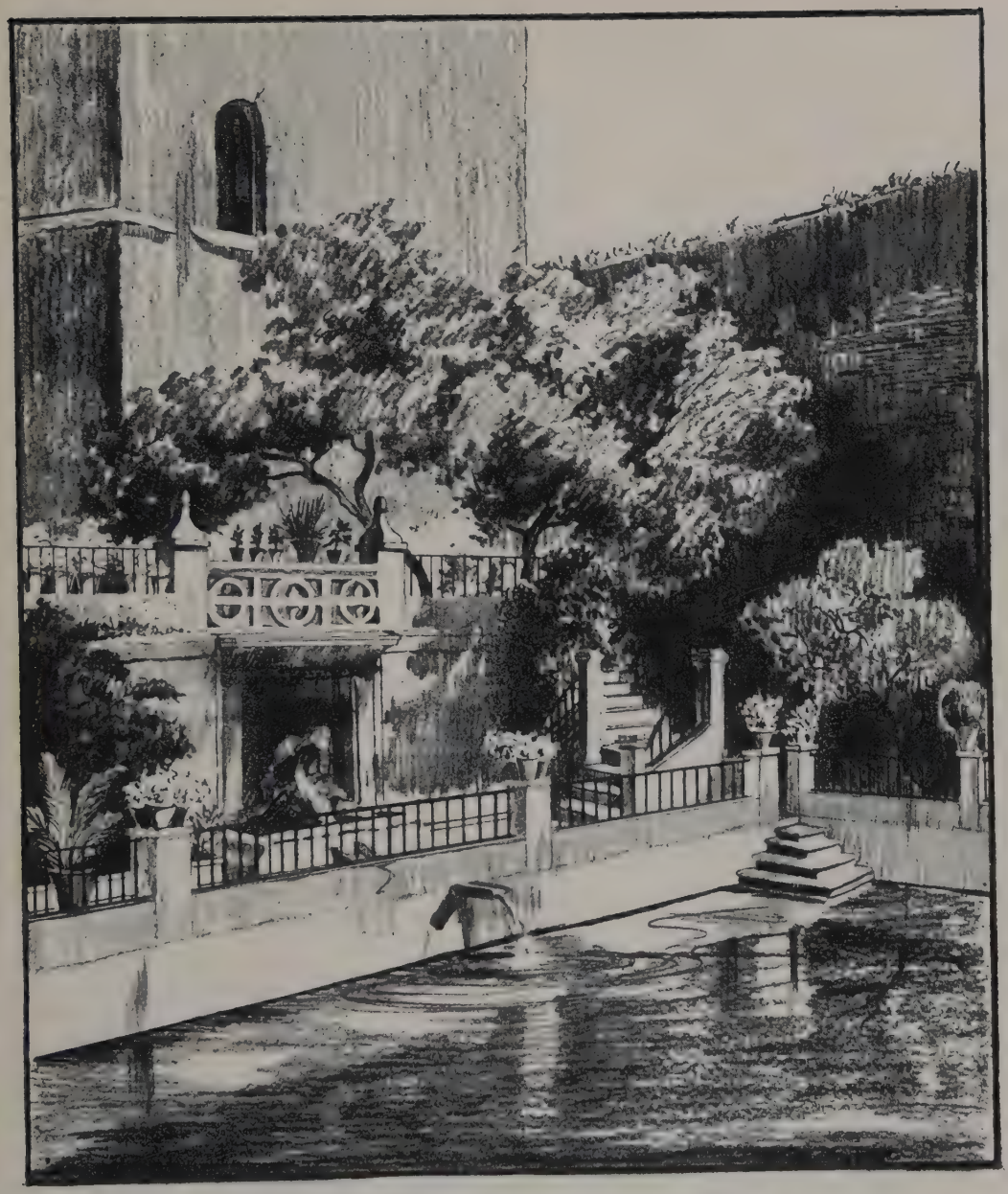
For those who live in hot, dusty climates or in hot, humid ones, constant bathing is almost a necessity. Along the Mediterranean, where all one has to do is to step into the sapphire sea so blue that one expects the water to color off, bathing is a poetic indulgence. Away from the sea, marble swimming pools edged with Myrtle and Orange trees are man's substitute.

The Arabs had public baths as the Romans and Greeks before them and during their ascendency there were said to have been six hundred baths in Cordoba. But in the cold North bathing was not indulged in and perhaps that is why the period was called the "Dark Ages."

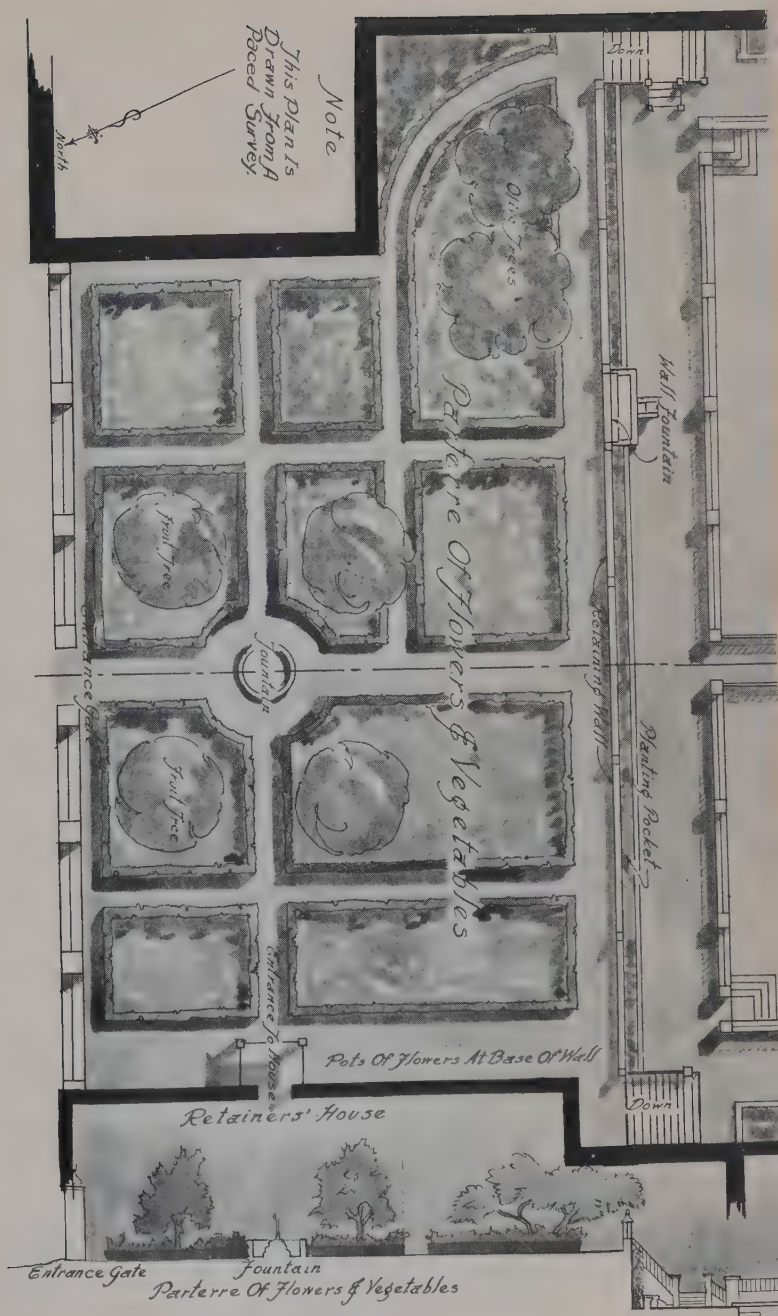
Swimming pools are being built in Northern as well as Southern climates to-day and although we have no Aphrodites rising from the foamy sea or Nausicaas to welcome shipwrecked mariners, we have champion swimmers from Panama to Brooklyn. The principal problems in building a swimming pool are the proportions and the backgrounds. The standard size of pools used for swimming meets are twenty or twenty-five feet by sixty feet. They are usually six and a half feet deep at one end, rapidly sinking to eight and one-half feet where the diver lands and finally rising to a depth of three and one-half or four feet at the farther end. They can, of course, be much larger, merely depending on the purse of the builder.

There is no reason why swimming pools should look like enlarged bathtubs and give a workmanlike prominence to steps and springboards. The frame around the pool and the bathhouses at the end can be so charming that the pool may look like an artificial lake or one of the marble pools in Spain. For what could be finer than the Pool of the Myrtles in the Alhambra at Granada? I am sure this was a swimming pool, as was the pool in the Alcazar at Cordoba and the one in the Alcazar at Seville.

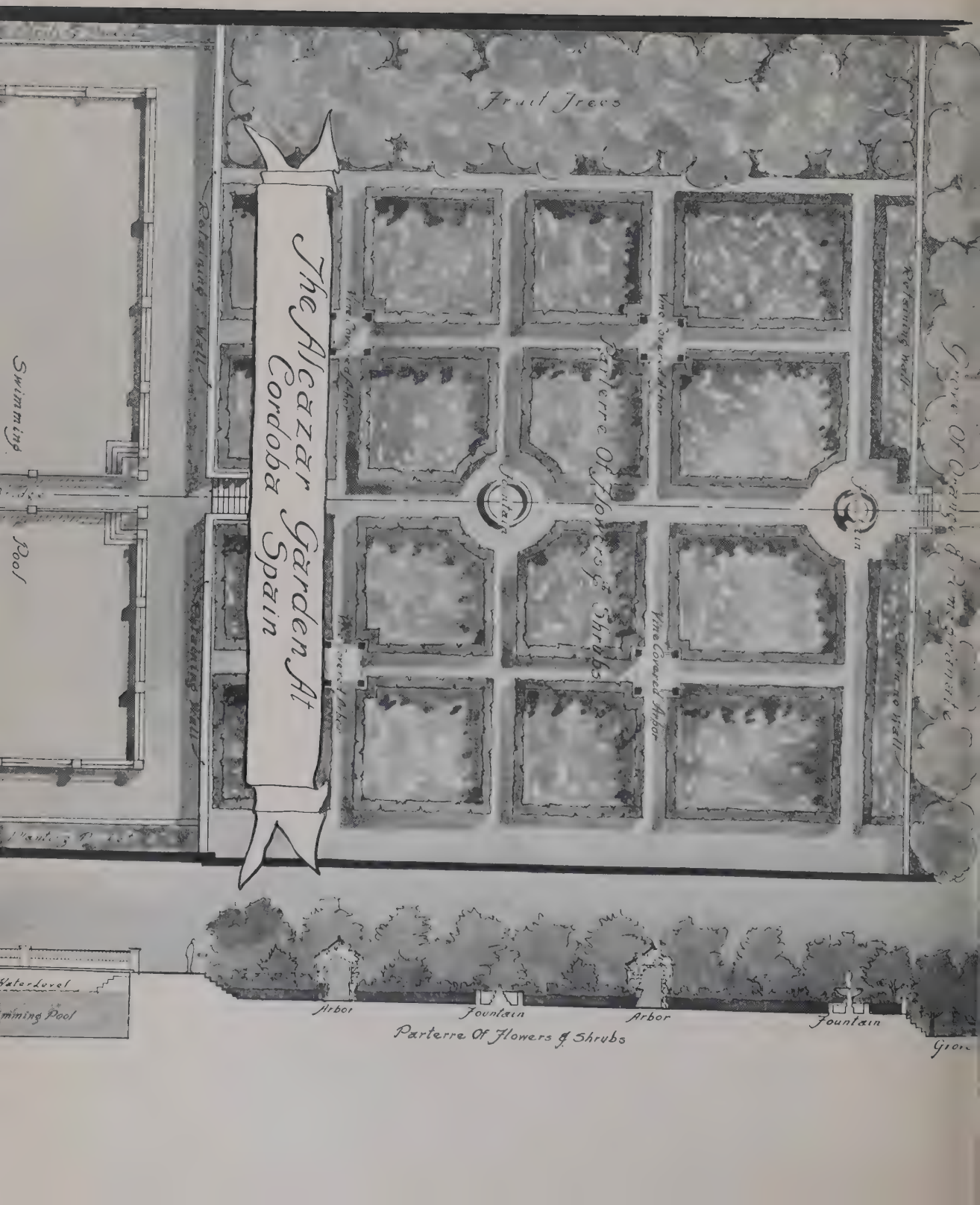
The pool in the Alhambra is in perfect proportions. It is 113 feet long and 23 feet 4½ inches wide. The patio around it measures 121 feet 6 inches by 62 feet 10 inches. On the two long sides run earthern beds 8 feet 4 inches wide cut out of the marble. In the corner of one is a lonesome Orange tree; the rest of the space is filled with an overgrown Myrtle hedge. The space between the pool and the hedge corresponds to a rim and is 4 feet 4 inches wide. I imagine the hedge was clipped rigorously to keep it low and that there were two rows of Orange trees on either side running the whole length of the pool and back of these against the wall at intervals iridescent, amphoræ-shaped jars, like the famous one now in the Alhambra, filled with flowers. Water enters the pool from two shallow basins flush with the ground at either end. It rises in the center of the basins and runs out through a trough,



Swimming Pool in the Alcázar Gardens, Córdoba



Cross Section A-B


The Alcazar Garden At Cordoba Spain
Fruit Trees
Retaining Wall
Swimming Pool
Vine Covered Arbor
Parterre Of Flowers & Shrubs
Fountain
Vine Covered Arbor
Retaining Wall
Grove Of Orange & Lemon trees
Pavilion Hall
Retaining Wall
Arbor
Fountain
Arbor
Fountain
Parterre Of Flowers & Shrubs

splashing into the pool below. How delightful to come from one's swim and brush one's wet limbs against the fragrant Myrtle and while lying in the sun to dry, smell the Orange blossoms and perhaps break off a juicy fruit and eat it.

In the Alcazar at Cordoba, the garden is a forgotten ruin behind the buildings now used as a barracks. To find it we had to poke around and keep on asking, for even the soldiers did not know of the gardens separated from them only by the thickness of the fortress walls. The pool here gives the effect of being divided into two by a bridge which spans it. I was told there are ruins of bathhouses under the terraced wall. The garden is on three levels and the pools are on the second one. There is no tile and no carved stucco, no fretted archways or marble. It has been stripped bare of all ornament and the great crenelated battlements of the old castle act as its enclosing walls. A charming place to dream and reconstruct one's own picture of the garden without the intrusion of ugly or overdone restorations. However, the time is surely not far distant when these gardens will be discovered and "improved."

In modern pools the rim can be flush with the ground and the water only twelve inches below so as not to expose any more of the concrete or tiled walls of the pool than necessary. The walks around the pool can be of marble, or when this is not feasible, of tile or tile set into concrete or any of the combinations used for the pavements in the Spanish gardens. In the North, blue stone stepping-stones are set into the grass encircling the pool. As backgrounds, Orange trees, flowering Crabs, or other small-sized trees are better than tall-growing ones which would give too much shade. Fragrant-leaved shrubs and hedges near the pool, as in Spain, are delicious. Perennials or annuals look fussy around the calm body of water, it seems to me. Large potted plants in tubs or majolica jardinières are more incisive and weighty and in better proportion.

Big pools are built for ornament to have still, reflecting waters without any idea of using them as fish tanks or swimming pools. To receive the most reflection the pool should have its longest sides run from north to south and have tall planting or walls close to its west and east banks to throw shadows on it. Green near the pool will darken it and white lighten it. In shallow pools the water looks silvery and in deep ones it becomes gloomy. Sea water is green in a pool and clear, fresh water blue.

The lining of the pool can be painted to tint the water, but I am told there is no way to make this lasting. They are sometimes painted black with tar. They can be lined with glazed and colored tiles, but when the water is deep the tiles will not show through. In Spain the water in the small tiled pools is often just deep enough to cover the surface. It makes the tiles glimmer to have them wet. A blue-tiled one filled with goldfish is a satisfying color combination.

Near the pool there is generally a garden house. In Spain they often build a roof over the well in the patio garden to keep the water shaded and cool.

The description of a garden house in Toledo in Arab days is often quoted. It tells how the water ran over the house and down the sides so that one could sit inside without getting wet. In this chamber, fit for a sea king, lights were lit at night, which shone through the shimmering waters.

In Persian gardens lights were placed near pools to cast wavy, golden reflections on their indigo surfaces and illuminate the faces of those who had come to listen to the murmur of the waters in the velvety blackness of the fragrant night.

Around the base of the Fountain of the Lions in the Alhambra is the following inscription which shows how water was beloved: ". . . Here is a garden containing wonders of art, the like of which God forbids should be elsewhere found. Look at this solid mass of pearl glistening all around

and spreading through the air its showers of prismatic bubbles which fall within a circle of silvery froth and flow amidst other jewels, surpassing everything in beauty, nay exceeding the marble itself in whiteness and transparency; to look at the basin one would imagine it to be a mass of solid ice and the water to melt from it; yet it is impossible to say which of the two is really flowing. Just note how the water flows on the surface notwithstanding the current underneath strives to oppose its progress, like a lover whose eyelids are pregnant with tears and who suppresses them in fear of an informer. . . ."

GARDEN ORNAMENT

Iron Grille in the Alcazar, Seville

GARDEN ORNAMENT

"I'll seat my love amidst the bower,
With rosy garlands bind her hair;
Wreathe round her arms the jasmine flower,
Than those white chains more sweet and fair."

—*Hafiz, The Omen.*

THROUGH a doorway in the wall almost hidden by espalier Orange trees we come into the garden and sink down on a smooth, tiled bench in the shade. As we watch the sunlight silver the little stream of water sputtering up from the pool in the center of the patio we dream of Arab emirs seated on silken cushions reading poetry aloud in the company of poets and philosophers. They fade away and we see the Christian kings and queens who succeeded them surrounded by scheming courtiers or taking council of their priests and astrologers. The queens trailing their brocaded gowns on the ground, the courtiers with starched ruffs falling over their steel breastplates, their spirits as narrowly confined by their beliefs as their bodies by their tight, stiff clothes. Perhaps the emotions of the stirring past send out vibrations which still throb from these walls and give the thousand-year-old gardens their subtle, indefinable charm.

There is no efficient perfection, no shining newness in these gardens. Where the dull old tiles are broken they are patched with new ones and as portions of the dark Box hedges die they are perhaps replaced with golden Myrtle. The mending and piecing give the gardens a human quality like the scars inflicted in the battle of living. A hiatus or imperfection rouses one to fill the gaps and complete the work in one's mind, as no faultless garden with tiles all complete and pots in military rows ever does.

In copying them we must not start out with patches and meaningless irregularities, or the effect will be as absurd as the romantic gardens of the

eighteenth century with their mock ruins built to imitate crumbling Gothic towers or tumbled-down Greek temples. In the originals there is a reason for each patch and a purpose in the placing of every object. To acquire the charm of these gardens we must build ours slowly and let them grow with us and not try to complete them within a few months or even years. Under five years most gardens are still in their swaddling clothes and when they reach fifty they are only on the threshold of their youth.

The accessories of the Spanish garden, except for the flowerpots, are built into the walls and pavements and form an integral part of the architectural scheme. Though the gardens appear simple they are rich in ornamentation and variety of detail and often two or three different materials are used in building the pools and benches. The ornaments are so well placed that the gardens give an impression of emptiness and space. This is helped by their neatness, for even when they are neglected and partly fallen to ruin they are tidy. There are no rank-growing grasses or lawns, but neat earthern or tiled walks and the beds edged with exact lines of tile or brick.

An absence of crowding makes the gardens peaceful and the presence of benches makes them restful. Balancing in a standing position is so uncomfortable for two-legged man that it reposes him merely to look at benches invitingly placed against hedges of Oleander or Myrtle. A garden without seats is as unlivable and bare as a room without chairs, and yet it is surprising how often there are no benches or seats in out-of-door rooms.

In the patio gardens the benches are built into the house or garden walls and under pergolas. When the walls are low enough they are used as a combination wall-seat. The higher walls have seats built into them like a ledge.

The mission in life of garden furniture is so different from that of indoor chairs and tables that they should show their unlikeness in their appearance. The out-of-door bench must be able to withstand the elements preferably

Concrete Pergola, Parque Maria Louisa, Seville
Benches with Tiled Edging

Tiled Bench Under Pergola, Parque Maria Louisa

without a protective coat of varnish or paint. For the South, where there is no severe frost, the tiled concrete benches are perfect. Once built they stand forever and are beautiful in addition to being practical. These typically Spanish benches are made of concrete cast in wooden molds and faced with tile set in cement or they have a brick base and are covered with cement. The benches should curve back enough below the seat to leave room for the feet and the seats should tip forward a little to shed water. The glazed tiles are smooth and cool to sit on. The tile facing of the benches usually matches the color scheme of the garden. The safest combinations to copy are facings of unglazed earth-colored tiles with inserts and a narrow border of glazed and painted ones, either in solid colors or patterns, for the modern polychrome tiles are apt to be garish and it is best not to be too lavish in their use.

Perhaps the Spaniards are used to sitting straight up in their chairs, as was the custom in the eighteenth century and later when an English gentleman became famous for making the "Grand Tour" through Europe in his calèche without leaning back once. At any rate they often build their benches without backs. These low wall-like benches are used to outline the garden and when set against a hedge do not look uncomfortable. They are also built against the wall of a house, which is sometimes tiled to look like the back of a seat.

Many seats have backs which are either of concrete cast all in one piece with the seat or of iron set into the seat. These last must be smooth, so as not to scratch the comfortable person who likes to lean back. When seats are made with very high concrete backs they are apt to look clumsy unless given a strong background of planting. In a California garden I once saw two of these high-backed concrete benches standing forlornly on either side of an entrance without any setting of trees or shrubs, like lonely immigrants in a foreign land.

We have a picture of a stone seat with a high back from a Baroque garden

with the curves and flourishes of its period. It might make a good model to cast in concrete and could be used as a fountain, too.

In the parks there are a few seats placed on low platforms like thrones having steps to lead up to them, which would look well in an exedra surrounded by clipped hedges. A concrete bench standing on the ground must have a cement foundation of several inches under it, to prevent it from sagging.

There is so little space for flowers in these tiny paved gardens that places are built for them in the benches. One type of bench has hollows at each end of the seat into which the pots are sunk and where a nearsighted person might sit down on the plants by mistake. However, other arrangements are both practical and charming, such as lengthening out the bench with a wall on each side, which terminates in a post to hold a pot.

In German gardens there is always a table snugly encircled by chairs for tea and coffee parties. I only saw this once in Spain, and upon inquiry found that the garden belonged to a gentleman of German ancestry. Although the benches are not arranged for eating, the garden units are so small that they are never too far away from each other to interfere with a low-toned conversation.

If you have movable chairs in addition to the tiled benches, you are not held down by the rigidity of the seats fastened to the ground, but can move the furniture from the sun into the shade on a hot day and back into the sun when it grows cooler.

In Spain they have low peasant chairs made of dark wood with seats of braided rush or rope and backs of wooden spindles fastened to carved crosspieces. They are light to move, go well with the architecture, and only require oiling or waxing, as all wooden furniture does, to keep them in good condition. They are so much a part of the Spanish picture and so different from the usual furniture that they add local color to the patio garden. In Spain

The Archbishop's Seat at Un Brete

one sees groups of peasant women seated on these little chairs embroidering bright textiles, always with their backs to the streets like nosegays against the whitewashed walls. In Seville they make light-weight wooden furniture with rush seats. The wooden frames are painted yellow, red, black, blue, or green and decorated with designs like their pottery. We, too, can paint our furniture in orange, vermilion, bright blue, or other bold colors and need not keep to the timid browns and greens. Let the furniture as well as the pots and benches stand out fearlessly in the brilliant Southern light or in a fainter Northern one!

When the sun beats down so pitilessly that even the narrow streets have awnings stretched across them, almost every garden has a pergola where the veiled light is shorn of its fierceness. The vine-covered crossbeams may shade the whole patio and make it possible to work there all day.

Off one of the fascinating back streets of Cordoba there is a tunnel-like entrance passage roofed its whole length by beams overhung with grapevines. When I was there in September, pots of Aspidistra and Asparagus fern were fastened to the walls. It was an emerald entrance to the sunlit garden beyond.

Stairways have pergolas built over them, and they span narrow streams where the vines have a moist bed and their luxuriance keeps the water cool and shaded.

The walk along the river Genil at Granada has been treated charmingly. First comes the famous river, then a steep bank, then a wall topped with flowerpots from which rise the columns of a vine-hung pergola. The pots are cemented on to the whitewashed wall and filled with fragrant flowers; so one can walk along the banks of the oft-sung river under the shade of the pergola where fragrant flowers scent the evening air.

The simplest pergolas consist of a few rough beams supported on rustic posts to shade an entrance doorway of a country farmhouse. The crossbeams

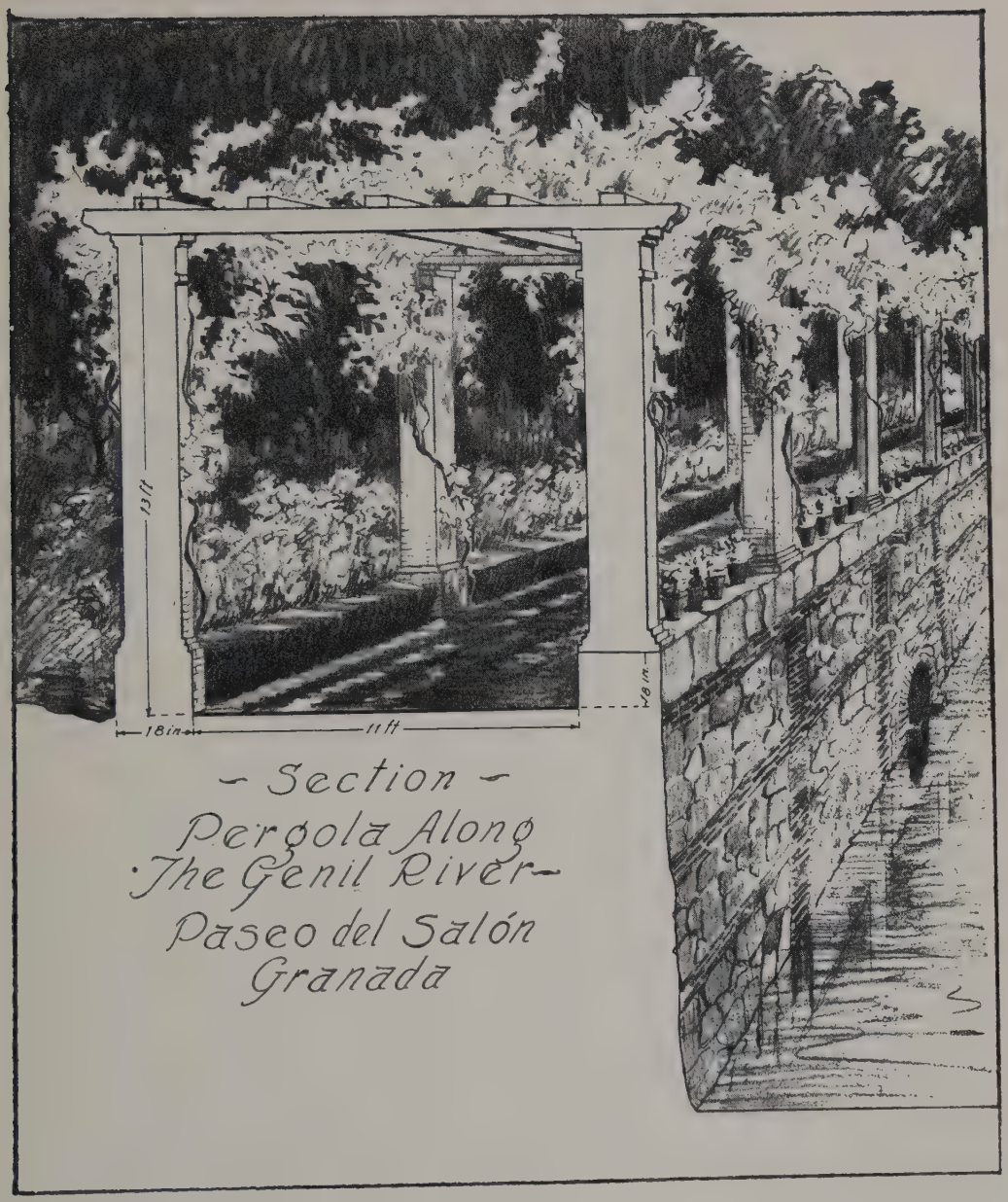
are usually of wood roughly squared and either left natural or painted black or blue. In the United States we often color the crossbeams with a thin stain in red or tones of brown or use rustic beams left unpainted preferably of cedar or chestnut both of which are durable and can stand exposure. They should be slender and airy, for their only burden is the vines swung over them to shade the ground beneath.

One can imagine a pergola with columns of rose-colored marble supporting crossbeams covered with gold leaf. This would have to be protected from tarnishing by spar varnish. At Ronda, in a Rose garden paved in black and white tiles, there is a pergola of creamy columns across which are laid beams of cedar wood painted black and garlanded with pink Roses.

Crossbeams of fragrant woods add to the delights of the garden. The marble columns in the Spanish gardens are either garnered or copied from deserted old palaces. They are of shiny translucency and are low and slender with exquisitely carved capitals. In modern gardens the small, antique columns are sometimes used as pedestals for bronze figures.

Where wood is scarce other materials are substituted and posts are made of concrete or brick, this last left exposed or whitewashed. The concrete or whitewashed post is embellished by having a diamond or square design of polychrome tile inserted near the top. The posts do not invariably rise straight from the ground, but change the formula by resting on a low wall made either of concrete faced with tiles or of brick or other material to match the posts or contrast with them.

The vines should not be allowed to grow thickly over a pergola but should clothe it scantily to reveal its proportions. Two or three different vines can be grown on the same pergola without concealing its form if they are pruned back and not planted too closely. Wisteria brings its lilac panicles in spring followed closely by the riotous Roses, while the waxy Jasmine flowers almost all season but most profusely in the late summer. Wisteria and Jasmine can



– Section –
Pergola Along
The Genil River –
Paseo del Salón
Granada

swing over the roof of the pergola, but the Roses are best confined to the posts so that their branches will not sprawl over the top and look untidy. The three together or combinations of other trios give the pergolas three separate periods of bloom. Two vines should not flower simultaneously, as they belittle one another but each vine should queen it alone with the others to act as a leafy green backdrop. Jasmine and Virginia Creeper combine well, for the shapes of their compound leaves are similar and so do Jasmine and Clematis. Many varieties of Passion flower and Trumpet vine are used on pergolas.

At Seville in the Parque Maria Louisa enclosing the Rose garden at one end and raised above it is a long pergola-arbor of living Monterey Cypress (*Cupressus macrocarpa*). The trees are bent and clipped to form the posts, arches, and roof. Their golden green color stands out against the deep blue sky while masses of tangled yellow Roses billow beneath them.

Summerhouses are made of living trees, too. They are called "glorietas," hymns in praise of gardens like the glorias in the church litany. At Cordoba there is a glorieta trained to simulate a ducal crown. It is in the center of a little paved court in an old garden where the only other planting consists of four Box trees grown enormously fat from peaceful living, one at each corner of the green mansion as if holding it down to the ground. The Box trees are three hundred years old and ten feet in diameter. A glorieta of the deliciously fragrant Philadelphus coronarius on a simple wire frame has been built in Cordoba, and there is no reason why Forsythia suspensa or any other shrub with lanky branches could not be used. Trees or shrubs could also be bent and fashioned into green hoods to enclose and extend over a bench set within their enfolding arms.

In the Middle Ages in Europe the gardeners were adept at building wooden frames for arbors, glorietas, and pergolas. But to-day to support the vines and trees we use galvanized iron pipes and have them bent by the plumber. The iron framework should be about one inch in width and to

hold it in place have a T-shaped crosspiece, either screwed on or soldered on to the base, which is two feet below the ground. Or the pipe under the ground can be set in concrete, but this will interfere more with the roots than the narrow iron crosspiece which holds the arch steady. If the posts are painted dark green above the ground they will not show at all.

Trees bent to form arches are popular in the Spanish gardens. The arches are either single and composed of two trees which meet in the keystone of the arch, or double intersecting arches of four trees. To have thick arches and glorietas quickly one must buy the trees quite wide and shear them back severely. If there is time, slender young ones can be used which will grow more ample girths as they age. The trees are tied to the supports with soft cord and trimmed once or twice a year. Archways of evergreens look well the year around and require less care than those of wooden trelliswork covered with deciduous vines. Once set in place the evergreen arches, except for being clipped, require no further care, but the vines on the wooden supports have to be taken down when these are painted.

In Spain they use Monterey (*C. macrocarpa*) and Italian Cypresses (*C. sempervirens*) for their arches and arbors and occasionally Box. Cedars (*cedrus*) and Arbor Vitæ (*Thuja*) can be clipped and trimmed too. Red Cedar (*Juniperus*) and White Cedar (*Chamaecyparis*) grow from Maine to Florida. Roses are spiraled around the green arches and blue Ipomeas, also Virginia Creepers, for their scarlet autumn leaves.

Topiary work probably existed in the earliest gardens along the Mediterranean. It was used by the Greeks and Romans who developed it to absurdity and considered a knowledge of tree sculpture so important for the gardener that he was called a "topiarius." They clipped Box hedges and snipped their trees into birds or griffons, cocks and pet dogs.

The Spaniards do not go in for birds and beasts cut out of the green, but shape their trees into arches and cut the shrubs straight across and down to

Cypress Pergola at Parque Maria Louisa

form backgrounds and borders. They trim the Box, Myrtle, or Bay into pyramids and umbrellas and in modern gardens the Peppers, Mimosas, Orange, and Lemon trees are cut into square-topped forms. These geometric forms are simple to carry out. They emphasize the trimness of the garden and enable man to sense his mastery over nature. Where the foliage is shorn it grows thicker and takes on a deeper green. The constricted trees, their leaves crowded together, fit into the miniature world of the patio garden.

In the typical Spanish garden there is no statuary. The explanation generally given is that the Koran does not permit representations of human or animal forms. This does not seem to me the real reason for the absence of statuary and topiary. If it were, why did the Christian Spaniards continue to ban figures long after the Muslims left?

When everything is planned to divert the thoughts from the hot reality on to a cool mirage of dreams, one does not introduce statues of dancing fauns, discus throwers, or Dianas with dogs held in leash scampering over the heads of animals cut out of shrubs. Coming from the sun-scorched streets it wearies one just to look at all that action.

Moreover large white marble Mercuries or Venuses are out of scale in these little, tiled gardens. They need to be approached through long vistas and to have tall green backgrounds. But small bronze figures, especially gilded bronze, embellish certain situations and go well with the tiles.

Roses are appreciated to the fullest in Seville, where even the cook coming from market wears a rosy blossom in her glossy dark hair. In France and Spain, pillar Roses, standards, and tree Roses are grown more than in the United States. The Roses rising to different heights flush the whole air with their bloom, and make it possible to have many varieties in a small space. The polyanthas are close to the ground, the teas and hybrid teas a little higher, and the standards lift their fragrance on the level with the nose, while Rose trees drip down clusters from above our heads like rosy umbrellas.

To support the pillar Roses they have stands of wrought iron which are so good looking that they are ornamental even when not hidden by the Roses. Although wooden supports are supposed to be better for the Roses, in France I have seen pillar Roses fling themselves in full abandon over iron stands.

There are not many garden houses in Spain. Perhaps they are not needed on account of the proximity of the house to the garden or possibly they were destroyed during the years of fighting and pillaging. The best known of the Spanish garden houses is the one of Charles V in the Alcazar gardens at Seville. Its two roofs, the upper one of the house, and the lower one of the porch, both covered with the gray-yellow-pinkish tiles, shine through the Palms on either side of the central walk. Around the porch and outside of it is a combination wall-seat faced with perhaps the most beautiful tiles left in Spain. The walls under the portico and the inside of the house are covered with the same kind of tiles. The contrast between the unglazed tiles on the roofs, the whitewashed walls, and walls covered with iridescent tiles is much more effective than if the whole house were tiled. The white walls reflect the iridescent colors of the tiles, many of them with a metallic luster, and the coloring of the whole is like an opal. The colors of the tiles are rich green, gold, sienna brown, yellow ochre, with small spots and lines of black, on the benches and walls of the house while on the tops of the parapets they are dark metallic luster and white. The rows of columns supporting the arched porch roof are old ones of marble, some of cream-white spotted pink, others black with white veining, and others again dull green with black veining. The house was built after the Moors were defeated, while they were still working for their Christian masters before they were exiled. It is like an exquisite farewell, so exquisite as to be heartbreaking. It was the last of its kind, for it seems as if the magic of the air, the sunshine, the gardens redolent of Orange blossoms and Roses were required to inspire this art, for soon after they left and went back to the parched hills of Morocco, the craftsmen

Garden House, Un Brete

degenerated and lost their cunning. However, the Spaniards who stayed on in this magic land in spite of many obstacles continued to grow and produce works of art.

At Un Brete near Seville, hidden from the unsuspecting tourist by blank plaster walls, there is a deserted huerta, a garden where fruits, vegetables, and flowers are grown together. A few Fig trees still spread their branches over purplish green Cabbages which, like impoverished noblemen, are surrounded by the tattered remains of the Box hedges of their former splendor. Ever since knowing about this place I look with suspicion at all high walls and wonder whether they, too, are hiding some secret gardens. It was built in the eighteenth century by a beauty-loving dignitary of the Church and many of the statues and jars now in the Parque Maria Louisa came from here. Fortunately they did not remove the little building of whitewashed brick with six entrances under semicircular arches capped by a roof almost Chinese in its curves. It is raised on a platform reached by a ramp, for it was built as a shelter for the blindfolded horse to walk around and around as he turned the water wheel. As the water was lifted up by the buckets it was emptied into two rectangular tanks and from there carried to the flower beds. This building could be adapted for a garden house, band stand, or casino.

Sundials are not prominent in Spanish gardens, for where time is of no importance, why bother to note its passing. However, I saw a sundial painted on the church tower of a country village. In gardens the sundial can be painted on the garden or house wall and should face south.

In lands where for generations the people have lived in fear of strangers, the entrance to the garden is kept closed, and in order to summon the guardian one must ring a bell attached to a gate. I once rang the bell of a house on the ramparts of Ronda and asked for permission to visit the garden. The servant went to inquire and came back with an alluring señorita, who was quite distressed that I had gone to the kitchen entrance by mistake, and beckoned

me in to the front door with graceful gestures and smiling black eyes. After passing through the patio so the whole family could see me, she showed me all over her garden and did not allow me to depart before I was loaded down with branches of orange-berried Pyracantha from her blue-tiled garden and overflowing with gratitude and appreciation of her graciousness.

The bell at the garden door is rung by pulling a wire having a ring at its end into which the fingers slip and tug. It should tinkle gayly as a prelude for the flowers and must not be deep toned and reminiscent of the solemnity of mass or funerals, although here in Spain funerals are an animated approach to the promised glories of the hereafter, a lively procession of horses and hearse decked with waving plumes and priests clad in the gold-embroidered stoles made from the brocaded silks of pious ladies' cast-off evening gowns.

Over the garden entrance a wrought-iron lantern swings to light the late homecomer in the dark. We have pictures of several which could be swung over front doors or at the entrance to the property.

Although not strictly a garden ornament, the treatment of the tennis court can be so attractive that it is a delightful feature. In a private park near Madrid there is a court in a setting ideal for a Southern climate. The two ends are bordered with a hedge of Pittosporum as high as the back stops and the two longer sides with a lower Box hedge. Both hedges are trimmed exactly and placed tightly against the back stops and outside of them. They make a thick green wall which softens the glare. Beyond the hedge and far enough away so that their roots will not grow into the court, trees are planted in a wide rectangle around it, shading it so that one can play even while the blistering sun is shining. Tennis is fashionable in Spain, and the queen and her court ladies healthily bounding about the court in abbreviated skirts are quite a contrast to the Spanish court ladies of the past who stare down at us in their ruffs and stiff brocades from Velasquez's paintings.

In hot lands the more openings, doorways, and windows where gentle breezes can enter the better, so the door is often kept open and the house screened from the street by a curtain. There are hideous ones of beads which jingle as they move. But they also have good-looking linen ones embroidered with a broad band in color or black wool across the bottom. They are very like the curtains tightly stretched over the hoods of the mule carts, miniature models of covered wagons and drawn by tandem teams of three or four mules. Linen curtains on the doorway from the house to the patio are practical, as they shade the inside without excluding the air. Linen seems to last where the sun would scorch a thin material in no time. The patio is open to the sky and in some houses a curtain is drawn over it during the hottest time of the day. It is often orange, like the sails of the fishing boats on the blue Mediterranean.

In Spain there is a unique garden ornament not found in any other lands; this is the out-of-door bookcase. They are four and a half feet high and less than two feet wide. How much pleasanter to read and study in the cool shade of trees and sweet-smelling flowers than shut up in ill-ventilated libraries! These bookcases are placed in the public parks. What would happen to one in Central Park is hard to say, and we will leave the details of the wrecking to the imagination of the reader to fill out according to his own preference in horrors. No less an authority than Monsieur Forestier told me that there is the record of but one theft from the bookcases, and that of a magazine. However, if you break off a flower when you shouldn't, in the twinkling of an eye a courteous guard dressed somewhat like the huntsmen from a comic opera approaches you and smilingly asks for the fine.

The bookcases are tiny and completely faced with tile. They look like jewel caskets, and if they are deep enough to set the books far back they could be used in rainy lands too, and would be handy places in which to

keep the garden records and plans as well as essays and poems for the bookish gardener who never likes to be too far from his favorite authors.

In the exposition grounds at Seville, there is a bookcase dedicated to Cervantes in a little square to itself. It is surmounted by a brightly colored porcelain statue of Don Quixote on Rosinante, both rider and horse as real and vital to the Spanish public to-day as when they were first created three hundred years ago.

This account of Spanish-garden ornaments may suggest how benches, tennis courts, arbors, sundials, or lanterns can be a means of artistic expression, and teach us not to buy our garden furniture ready made and have it look so like the ornaments of every other garden that they will pass unnoticed, but instead to proceed slowly and build the accessories to fit the garden and have them in harmony with the tastes of the people who are to use them, whether it will be to read poetry or play bridge as they sit on the benches under the shade of the vine-draped pergolas.

SKY GARDENS

Pierced Concrete Wall, Ronda

SKY GARDENS

"Rise up, rise up, Xarifa! lay the golden cushion down;
Rise up, come to the window, and gaze with all the town!
From gay guitar and violin the silver notes are flowing,
And the lovely lute doth speak between the trumpet's lordly blowing,
And the banners bright from lattice light are waving everywhere,
And the tall, tall plume of our cousin's bridegroom floats proudly in the air."

—*"The Bridal of Adalia," ancient Spanish ballads; translated with notes by J. G. Lockhart.*

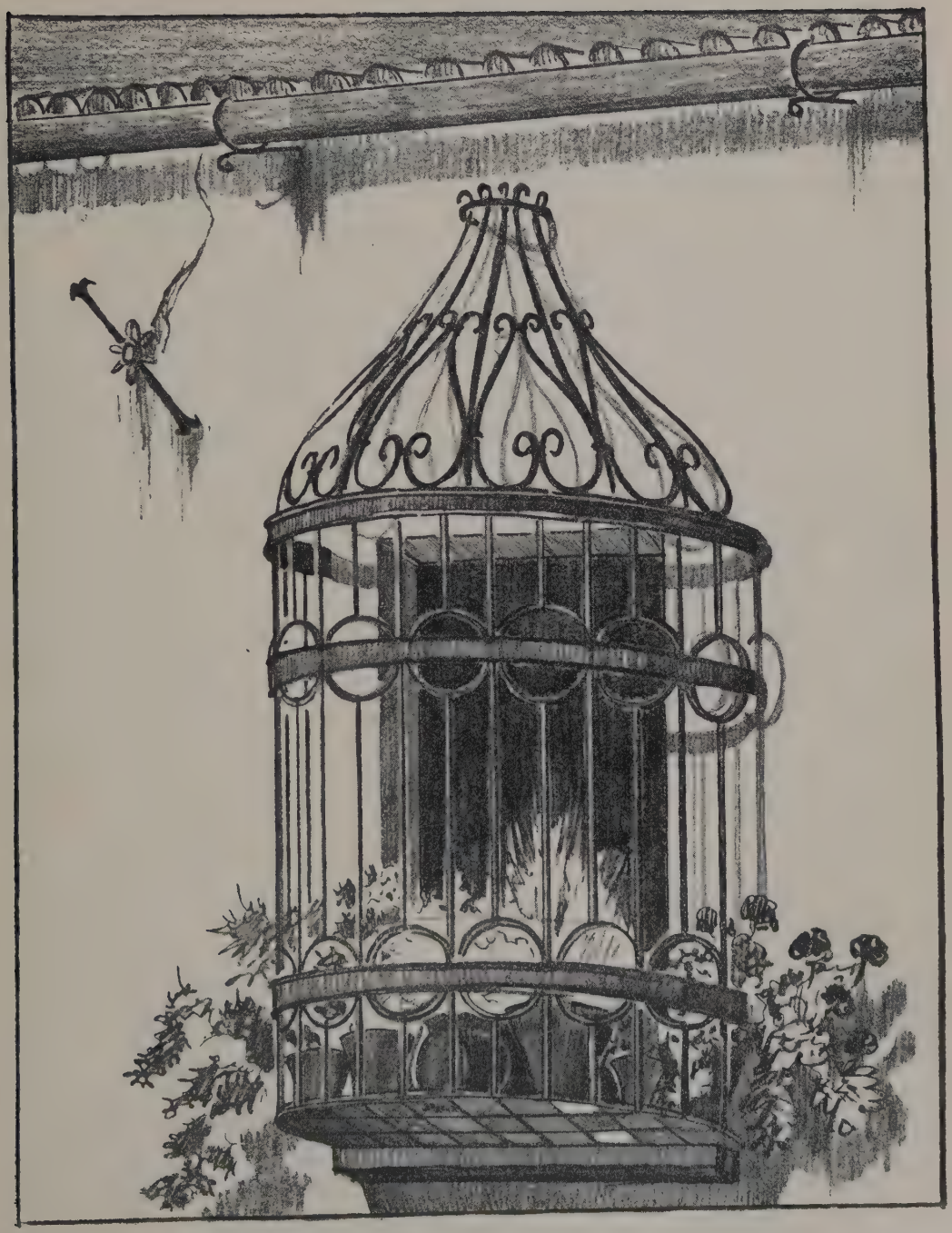
FOR centuries past a human life more or less was of as little moment as a light blown out, a story ended. In Spain the constant brawling and fighting, the raids with their accompaniment of loot and fire accustomed the people to live in small spaces behind the protection of walls and grilles. Now that the dangers are over they still prefer small spaces, perhaps because it is easier not to change. It is too hot to go on long walks or undertake the cultivation and care of large gardens, so that except for their evening stroll the women spend most of the day in darkened rooms and are content to look at the world from behind their grilled windows and tiny balconies.

In hot countries where there are no windowpanes, they close the shutters to keep out the rain and have iron bars as protection against thieves. The windows on the street level are guarded with long iron gratings, which also serve to keep the too ardent lover from his lady while he courts her. The people are so poor that the courtship often lasts for years until there is enough money to marry and in the meantime the *novio* (fiancé), standing on the street, nightly whispers his love to his lady behind the bars. They are so romantic that the stimulation of the senses without gratification, the constant upward sweep of the emotions without the disenchantment of satiety, seems to delight them.

The windows in the upper stories are often barred too, but in the newer houses their only embellishment is a balcony. From her perch on a balcony the sheltered woman unaccustomed to mingling in crowds or the curious one desirous of gathering food for gossip can safely watch the play of life going on in the street below. There is always a clatter and shrill shouting in the streets starting in before dawn when the donkey's jingling bells and the squeaking of the carts announce the carriers' departures for distant towns, followed by the goatherd milking his tinkling flock at each door, and keeping up until late at night when the last family returns from the paseo and the frequenters of the coffeehouses straggle home. The plain, painted walls of the houses with their few windows do not show what is going on indoors, the whole action takes place on the streets, and every passer-by, be he a cowled, barelegged monk walking in sandals, a countryman sitting on the stuffed saddlebags across his mule, or a group of black-clad women returning from mass, each stands out distinctly in the dry, clear air and has a dramatic intensity.

The only people who enjoy balcony life in America are the tenement-house dwellers on their fire escapes. The rest of us miss both fun and fresh air by not having balconies outside our windows. One might take a book, or one's sewing, or merely sit out of doors for an hour or so and look at the passing crowds, less colorful but more cosmopolitan than those of Spain. In European hotels, long French windows opening onto balconies overhanging a lake or mountain view, are delightful places to have breakfast or afternoon tea.

In the Spanish cities, balconies surrounded the squares where the *auto-da-fés* took place, and seated here the court ladies and gentlemen of another day watched the gruesome burnings of the heretics. Our modern theaters with their boxes were modeled after these squares with their balcony-hung windows. But other pleasanter happenings pass beneath the balconies:



Iron Balcony in a Town in Estremadura

weddings, religious processions of the laity in evening dress or historical costumes, with the priests in their green, scarlet, or white, gold-embroidered vestments, followed by acolytes carrying a sacred image. The Church furnishes the spectacle, the theater, for the people who themselves are the actors. On feast days, brocades or bunting are hung over the railings most often in their favorite scarlet and yellow and they are cut to fit the balcony and kept especially for these occasions. These balconies, gay with bright stuffs and filled with animated groups of people, add far more to the pageantry than temporary stands made of unfinished wooden beams from which we watch parades in the United States.

The balconies are of wood or iron and are casually placed on the house façade. The wooden ones have broader rails and are either in the natural brown wood color or painted in bright tones. They are usually on the old houses and the simpler ones of to-day. Sometimes in the country villages, instead of pots, strings of scarlet peppers and golden ears of corn dangle from these balconies. The iron ones may be exquisitely wrought or very simple and all of them are in artistically satisfying lines. The iron ones are supported by iron brackets attached to the house wall from which they sweep up and around in an S curve. The floor of the balcony is tiled often in polychrome tiles and sometimes the under surface is tiled, too, so that the pedestrian walking under them and gazing up sees a colored panel over his head.

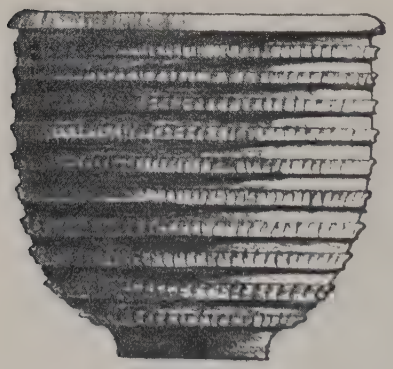
The Spaniards are so fond of flowers that they place them wherever there is a possible ledge or space for the pots to stand on, and the balconies are the favored places. The flowers here are in pots and not in window boxes, for these would be in the way during processions. Besides the prominent horizontal lines of window boxes make stiffer flower arrangements on the balconies than the freer ones of pots. In general the boxes are not so amusing or individual as the pots. However, in modern country homes,

under the windows where there are no balconies, tiled window boxes attached to the house walls are attractive.

No two arrangements of pots on the balcony are alike and they are often changed each season. There is no straining for balance or exact centering of the composition. They are never crowded and always leave enough space to show the fine wrought iron or wooden carving of the railings. In fact, they just fall into place anyhow, and fall gracefully and attractively. The balconies of the poor are often the prettiest; perhaps because the arrangement of the pots on their tiny balcony is their only opportunity to express their love of color and gayety, and they put their whole soul into it.

Except for a precarious window sill or fire escape, our city dwellers have no place in which to sun their growing flowers and since only Rubber plants and Aspidistra will grow without his life-giving rays, the embryo garden has little chance of survival.

In Spain, the pots are usually simple, of cheap unglazed clay and well shaped. Sometimes they are glazed and painted and again they are just daubed with water-color paint to match the decorations on the house wall. They may be all one shape and in different sizes, like a large family of growing children, or one size and in different shapes, or mixed. They may be of one color or of two colors alternating. The shapes and materials harmonize because they have all been made by the same artists from patterns, some of which have come down from the earliest Greek colonists. The pots stand on the balcony floor, hang from the wall behind it, or are attached to the railing. They are fastened to the balconies by being slipped into iron hoops which are open and have hooks at each end which clamp over the railings. They



Modern Pot of Ancient Design

come in all sizes to fit the pots. The weight of the pot holds the hoop in place. The railings are always slender; if they were thick the hoops could not be attached to them. The pots are slipped into these same hoops, which are fastened to the wall when they are hung around a door or window in company with caged birds, two or three of which may twitter their welcome beside an entrance.

One sky garden was around a grilled window high above the street. Little two-inch pots filled with ferns were attached all along the iron posts of the grilles and made them look like the mossy green hair of a Spanish Undine come up from her home at the bottom of the well for a lover's tryst. Pots are hung along the side of the windows and across the top, stood on the window ledge or any place at all, and always the effects are distinctive and perfect in their way.

The balconies with their pots of flowers bring color and fragrance to the streets and change their appearance for the better, like the smiles on a stern face.

Although it is difficult to imagine anything as personal as a balcony garden on our skyscrapers, yet where balconies have been placed they break the monotony, and if one or two pots with brilliant flowers were stood on each window ledge, perhaps the crowd would slow down its hectic pace long enough to glance up and admire.

In the pots on the balconies the Spaniards put almost any flowers, but they must be big and bright enough to be conspicuous or their effect is lost. The annuals with large flowers which keep on blooming for a long time are, of course, the best for this purpose. The favorite flowers are pink and red Geraniums, the Ivy Geranium (*P. peltatum*); Marguerite, Petunia, Fuchsia, Lobelia, Calendula, Nasturtium, Antirrhinum, Cineraria, Calceolaria, Chrysanthemum, Mesembryanthemum, Cockscomb, and Carnation. They like trailing Asparagus vine and other trailers and know just

where a trailer and an upright will be most effective. They study the different shapes of their plants and keep the movement sweeping in whatever direction they wish it to go and do not have the lines conflict or cross each other, as is so often thoughtlessly done in other lands in window boxes or hanging porch baskets.

In the Southern cities of Europe there is no "stone fatigue," for there are almost no streets where all that greets the eye is hard, dead stone. On the principal streets there are trees and often flower beds, and even where the streets are narrow the houses are so low that one can see the clouds flit across the sky. Broad green branches of leafy trees rise from behind a wall and, spreading over into the streets like the sign swinging at the door of an inn, show that there is a garden within.

From the balconies and courtyards one hears the singing and the strumming of guitars. The young men and women flirt and gossip over the flowers and freely enjoy their sensations and emotions, taking their fill of color, fragrance, music, and love.

But when winter comes the Spanish houses, constructed to keep out the heat and have as much shade as possible, allow very little sun to penetrate into the rooms and are uncomfortably cold. In the North they have glass-inclosed balcony gardens where the family can sit and sun themselves in the winter. They are built as follows: The usual balcony is lined with glass, which extends up quite a distance beyond the railing and is supported by an iron framework and terminates in a roof of glass. This little glass room is flat up against the house. In some of them the iron supporting the glass is elaborately wrought and in others it is simpler.

In Paris they have enclosed balconies like this, only smaller, like glass-covered window boxes, and here they place flowers during the winter months. I once saw some filled with pinky blue Hydrangeas quite lovely in their delicate coloring against the gray stone walls and cold, wintry skies.

Glass-enclosed Balcony, Seville

They would make splendid places for forcing spring bulbs and could be enjoyed by every one passing through the street as well as the owner of the window box.

In North African homes where the roofs are flat and covered with flat tiles, pots of flowers are stood on them, but in Spain the houses have sloping roofs and round roof tiles and there is no place for potted plants unless there is a niche or flat recess somewhere. Whenever there is such a place it is immediately filled with a plant or vine. Pots all one color can be used to accent some corner or line of the roof if it is possible to reach them in order to water them. I have seen this done, in Seville, with all yellow pots on a little cream-colored house with golden roof tiles.

Along the flat top of a broad, thick wall measuring about six feet across in Seville, there is a wall garden. The wall, once a part of the fortifications, bounds a private property on one side and looks into the public park on the other. Along the coping there is a lattice over which vines grow out of pots, and this vine-wreathed lattice shuts out the upper stories from the public and at the same time confines the view from these upper windows down into the patio and does not permit the eye to wander over the wall and out into the street. On the summit of the wall and in front of the lattice facing the garden are benches, and a long row of pots all alike and filled with the same flowers form a low hedge bordering this garden atop the wall.

On the parapet in the Alcazar gardens there is a colonnaded walk where Don Pedro liked to stroll in royal fashion above the heads of his courtiers sitting beneath him in the garden about twenty feet below.

The roofs are the coolest places to sit or sleep at night, where the slightest breeze is felt and there are no walls, hot with the stored-up heat of the day, to shut one in. The Orientals have always climbed up to their roofs after sundown and spread their rugs and cushions to sleep on under

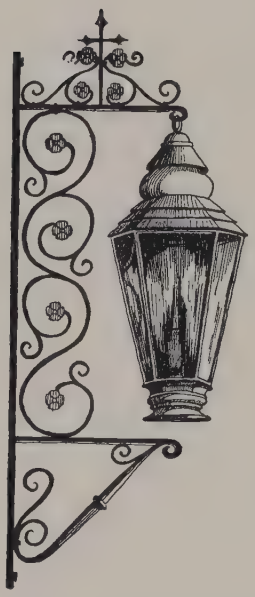
the velvety sky where they could look down on the twinkling lights in the sweltering courts and streets below them.

In modern times we, too, build apartments on top of our towers, called penthouses, and use our ledges and setbacks as roof gardens outside our shelflike homes. Restaurants, ballrooms, and tennis courts are built high up above the streets. Here we have, of necessity, to confine our plants in pots, and in the tiny space we can adapt the Spanish type of garden. A tiled floor and benches, a little pool, awnings, quaint peasant furniture, with background walls of lattice covered with vines, and you have a garden, such as Harun-al-Rashid never dreamed of, in a setting of clouds and with a view across eerie towers soaring into the sky so high and slim as to seem unreal in the pearly sunset light.

If one's purse is slim or the space very narrow, one can build a garden with a few pots, a little basin, and a lattice; or, if the purse and the space are fat and broad, one can have the whole of a Spanish patio garden. Almost any plant will grow, so far from the streets that the fumes of gasoline have become eliminated and dissipated. One can have most of the annuals, Hydrangeas, Privet, or other shrubs, and some even grow vegetables in their penthouse gardens, to pretend they are in the country. Since gardening is a pleasure any whim is admissible, whether it is to grow vegetables on penthouses or to build Spanish patio gardens on roofs. As long as it is fun for the gardener, why not?

As we learn to love flowers, they will become indispensable to us, and in time every window will have its balcony gay with flowerpots and our roofs and setbacks will be green with shrubs and flowers to the aviator who looks down on them from his silvered ship in the sky.

THE EVENING STROLL



Wrought-iron Bracket and Lamp from the Cathedral at Seville

THE EVENING STROLL

IN Southern countries the evening stroll is as much a part of the daily routine as eating and sleeping. As the hot day draws to its close the old people and the young, the fathers and mothers, with their children, leave the confinement of the walled enclosures and come out on to the paseos and *alamedas* (public walks) to cool off.

In Spain every town has its paseo. In small towns it is often the main street, bordered with Plane trees, along which the people walk up and down or sit at little tables on the sidewalks and drink coffee and sip liqueurs.

Wherever there is a fine outlook, the paseo, often built into a terrace, faces out upon it, and here the whole population gathers to stroll and look at the honey-colored plains purpling in the dusk. Their taste for cinemas is only beginning, and they are too poor to dash along dusty roads in swift motor cars.

At Malaga on the Mediterranean the park borders on the water front and through the branches of scarlet-flowered Hibiscus and fronds of Palm trees, one glimpses the masts and funnels of the ships at anchor in the blue waters of the harbor.

In many of the walled towns the paseos are along the ancient ramparts. But instead of anxiously peering down at the armored knights of the enemy directing the placing of battering-rams against the fortifications as their ancestors did, the townsmen of to-day strolling along the walls watch a belated countryman riding to his distant village or a tinkling herd of goats going to their shelter outside the town.

Many American cities are set down amid superb scenery, but instead of being able to see it from flowery terraces or tree-shaded water fronts more often one finds a railroad siding or the débris from the docks right

in the way of the view. This is part of our youthful hurry and untidiness, and as we grow older and more leisurely we, too, will build walks and terraces whence we can look out upon the mountains, forests, lakes, and meadows of our countryside.

In the paseos and parks under the trees there are benches for the weary, sand piles for the babies, and trickling pools for the romantic, and, in some, tiled bookcases for the studious. They bring all the adornments of the patio out to the public squares and parks, where they can be enjoyed by every one. Often when the streets are wide there is a walk running through the middle of the driveway. Trees are planted here, and sometimes the ground under them is laid out in beds and filled with flowers or carpeted with a low ground cover which bring a living green into the midst of a busy street. Orange trees, Elms, or Palms border the avenues.

In some of the cities there are flower stands under the shade of the trees. These are charming, with an octagonal or circular tiled base extending up about three feet, and a coquettish roof supported on slender iron posts. They are bursting with bloom from which the blossoms of the season are sold —not by a pretty señorita but a mustached old woman.

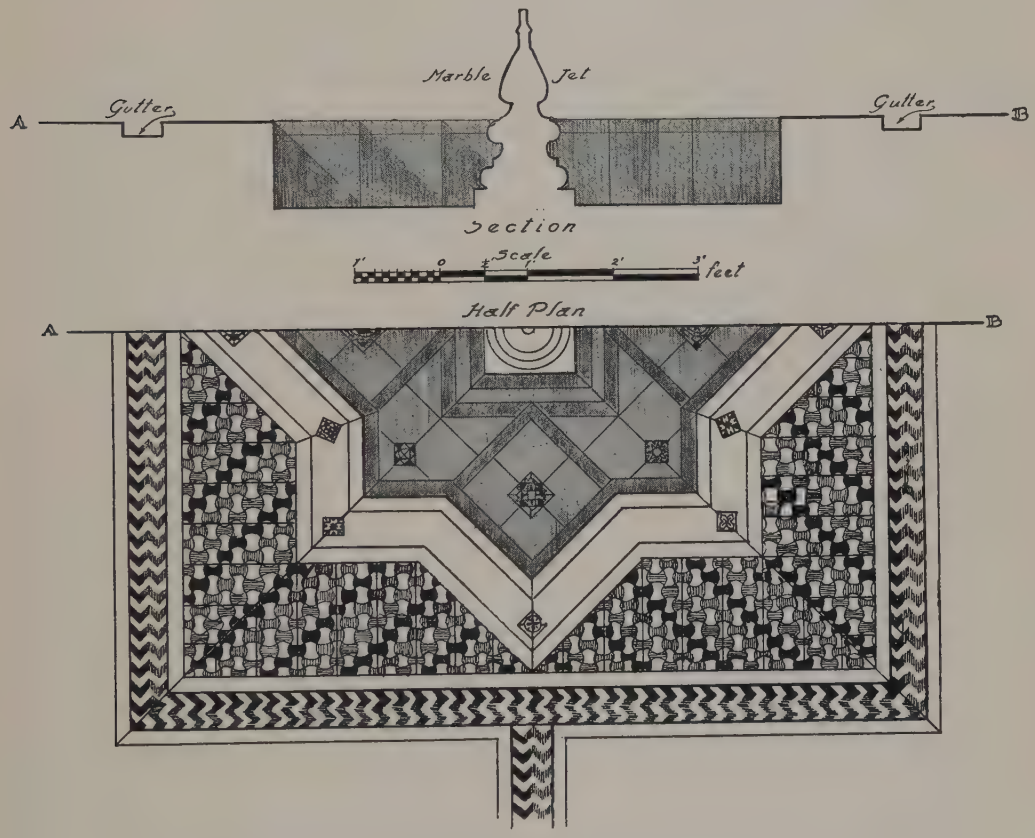
Trees will not grow where traffic is too heavy, and to shade the streets, in the old Spanish, French, and Italian towns arcades were built or awnings stretched across from house to house. In the Near East, pergolas festooned with leafy grapevines shade the sidewalks, most often in front of cafés, but the vines are untidy when the rotting fruit falls on the ground and rose vines or others are preferable.

In our modern cities we, too, can border the walks and drives with trees and have rose-covered pergolas over the sidewalks to shade them or colorful awnings which suggest the streamers and banners of a fiesta.

In the park at Valencia there is a great marquee with a bamboo roof supported on iron posts which shades several acres of twilight gardens

Flower Stand, Madrid

green with ferns and other shade-loving plants, a striking contrast to the heat and glare. A structure of this kind could have a canvas roof pulled across supports or one of loosely woven rushes, like the roof of a Hawaiian house,



Tiled Pool Below Level of Walk. The Field in "Snail" Pattern, the Border in "Zigzag"

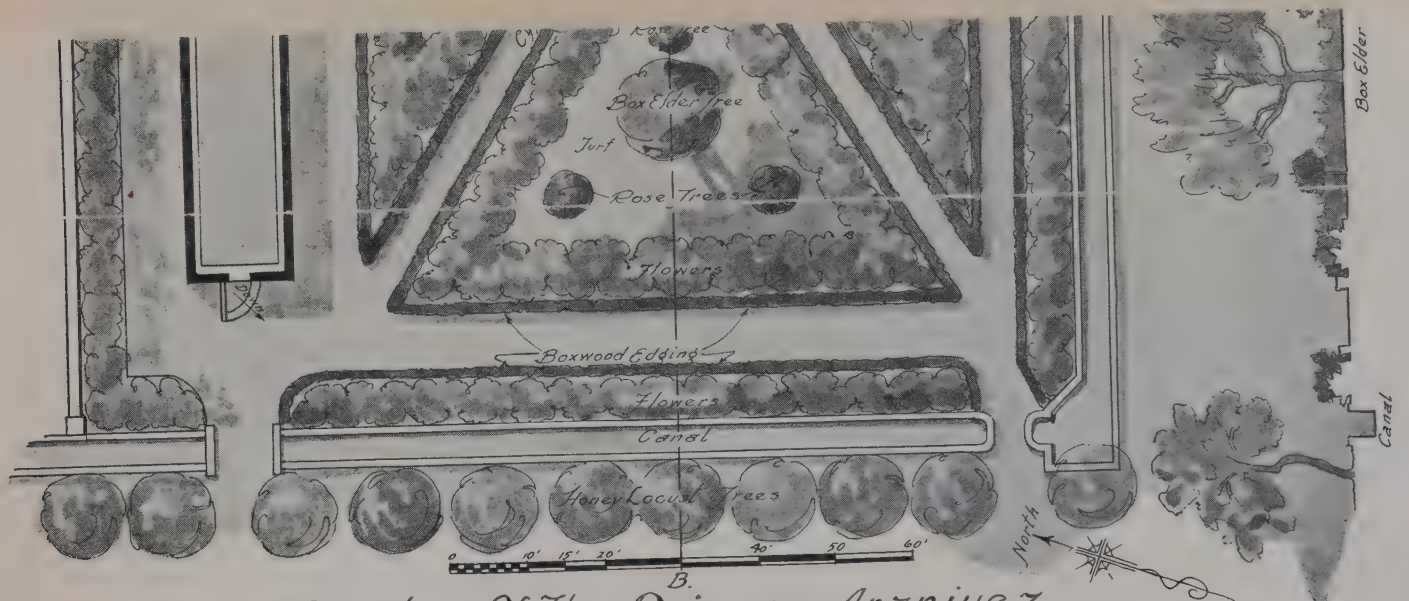
or a trelliswork of narrow slats covered with vines. The posts can be of iron, bronze, or wood, and painted green or brown to merge with the foliage. They must be slender and placed where they will not interfere with the walks and vistas.

In pleasure grounds smelling of Tuberoses and Jasmine, where Roses bloom most of the year, and there are bookcases filled with poetry and romance, one can with difficulty imagine a menagerie, that curious adjunct to our parks. Cages filled with wild beasts heaving back and forth frighten the children and are neither gay nor decorative. If one must look at caged animals in order to enjoy one's liberty, then have an aviary with exotic birds in strange forms and brilliant plumage.

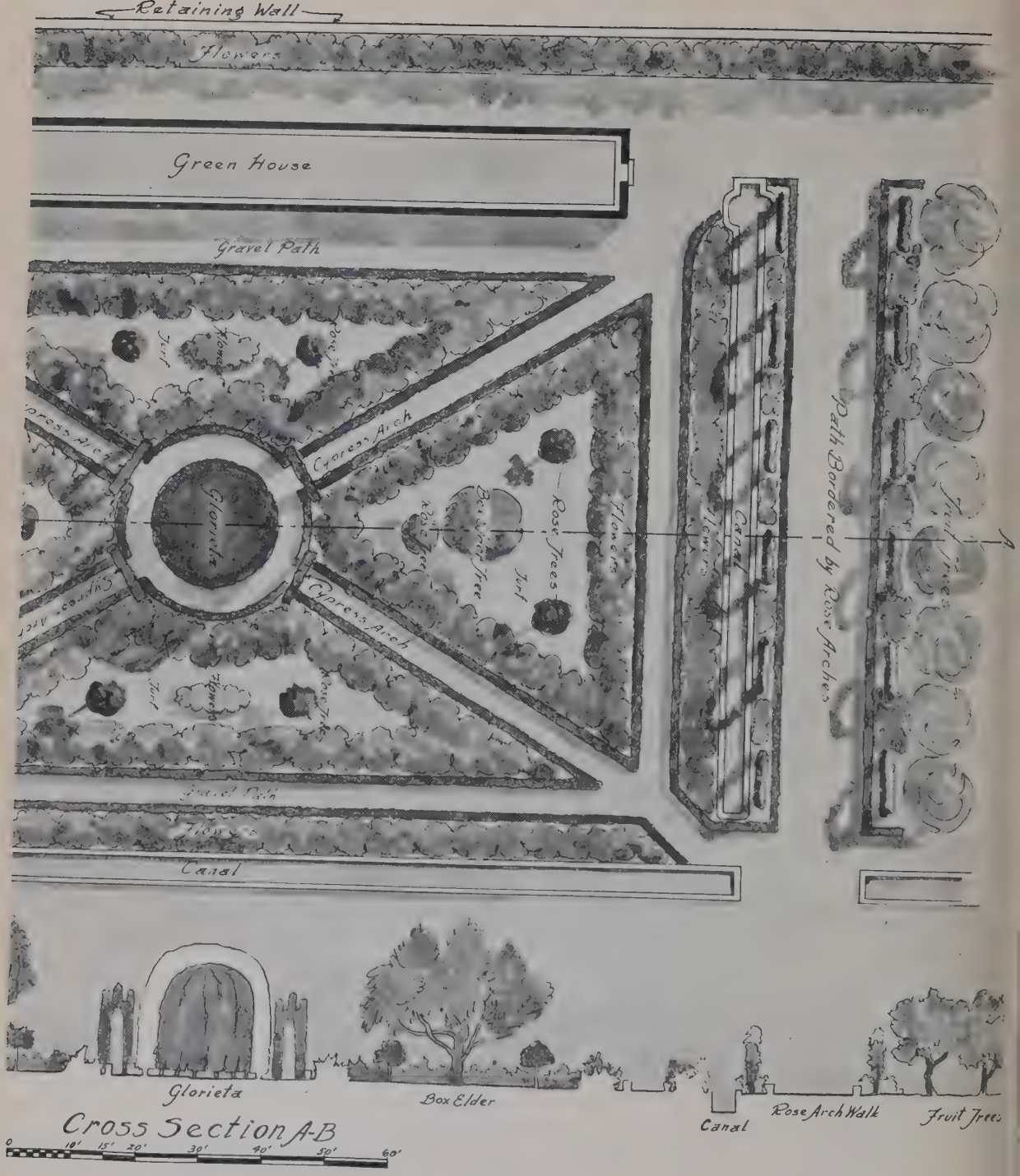
However, in the parks of Spain the menageries are so charming and so originally planned that one almost, but not completely, accepts them. At Valencia there is an aviary where the bird shelters are miniature reproductions of the peasant *barracas*, little whitewashed houses with steeply sloping thatched roofs. To see pheasants or pelicans come out of these copies of the native houses is just as if in an American zoo lions stared out from behind columned porticoes.

In Madrid there is an almost poetical zoo. Through its center runs a long walk paved with tiles which has tiny pools set into the pavements at intervals, and is arched over its whole length with supports carrying pink Roses. On either side of the walk are beds of pink and lavender Tulips to bloom with the Roses and for summer white Geraniums and foliage plants. Back of the walk among the flower beds are the cages which balance, as architectural features should. They, too, are like human homes either of gray stucco with thatched roofs or whitewashed country cottages. All through the garden, pyramidal and umbrella-shaped Myrtles rise from the flowers and scent the air with their fragrant leaves, fragrance being especially grateful in a zoo.

In the eighteenth century, during the decline of garden art, great parks were laid out in Spain by French landscape architects, which are inferior to the school of André Le Nôtre. Their wide avenues and parterres, courting the sun, were planned for a damp, rainy land and are unsuited



Garden Of The Prince ~ Aranjuez


Retaining Wall
Flowers
Green House
Gravel Path
Cypress Arch
Glorieta
Rose Trees
Box Elder Tree
Flowers
Turf
Canal
Path Bordered by Rose Arches
Fruit Trees
Glorieta
Box Elder
Canal
Rose Arch Walk
Fruit Trees
Cross Section A-B
0 10' 15' 20' 30' 40' 50' 60'

to a hot, dry climate where shade is essential. These and the English gardens with lawns and specimen trees are too difficult to maintain in this land of scant water.

Later the Spanish developed their own type of wood garden. The same vision inspired these parks as the patio gardens. They, too, are a dream come true to the man (this time a prince) who builds himself a grove in the midst of a desert, an enchanted forest surrounded by a magic hedge where only the favored may enter.

Many of the estates originally the property of the nobility or the very rich have now been transformed into public parks. As this is not a guidebook, there will be no descriptions of the parks of Moncloa, El Retiro, La Granja, Aranjuez, La Concepcion, and others. Instead some of the features which can be copied in similar climates of other lands will be described.

All of these parks have groves of trees planted in serried ranks, for nothing grows accidentally without the intervention and help of man on the arid plateaus of Castile or the hills along the southeastern coasts. A wooded park is the most difficult and expensive feat imaginable, a horticultural *tour de force,* and we admire the skill and patience expended in establishing and maintaining them. In one park all the top soil had to be brought from a distance on the backs of donkeys. There must always be irrigation, and canals are dug around the trees unless they are planted on low ground where they can be flooded.

The woods are planted with Plane, Poplar, Linden, Chestnut, and Magnolia trees. They use Redwoods and Silver Deodars and dark green ones for accents in front of buildings. Live Oak, Cork, or Carob trees do not lend themselves to a close-growing wood, but are effective when planted far enough apart for their branches to round out. Under the trees the ground is clothed with Myrtle, Ivy, Pachysandra, and other shade-loving ground covers, while the paths of a pinkish or gold-colored earth tamped down are

The "Glorieta," Garden of the Prince, Aranjuez

flecked with purple shadows glancing through the branches of the trees. In the shade of the woods one has a delicious sense of release from the unbearable glare of the open. One can see without squinting and walk without a hat or umbrella, and need not cling to the only strip of shade close to the wall as one is compelled to on the streets, but can stroll leisurely. When an opening is cut through the trees out into the surrounding country, the view of the sunburnt hills with their patches of Cacti and Palm scrub intensifies the cool green unreality of the forest, and makes it seem more than ever like a mirage.

In taming the wild forests of America, many features of the man-made Spanish woods can be imitated. Our forests are so choked with underbrush that in the South Carolina woods we can see the snowy cloudlets of Dogwood and Lavender wisps of Judas trees only by ducking our heads under floating gray veils of Spanish moss, and we would miss the patches of pale pink Azalea or Mountain Laurel of the Northern woods altogether if roads were not cut through the thick growth. By clearing away the undergrowth and arranging the planting according to a balanced form, instead of a tangled, confused mass, we will have a woodland garden where each plant stands out in its full beauty. Wisteria, Jasmine, or Cherokee Roses can be festooned from tree to tree along an alley or around an opening. One could have a double festoon with Wisteria above and yellow banksia Roses below. In the clearings in front of the dwelling or tea house the flame Azaleas or magenta-colored ones can be planted in corners to glow against dark Cedars, or perhaps the tall white ones in the rear and the pale pink in the foreground. Instead of permitting the Honeysuckle to twine itself over everything in sight, other less rampant woodland plants can be used for ground covers. The walks cut through these woods should be narrow so as to be shaded and the view along the sides into the mossy limbs of the trees is so delightful that there need be no great

vistas except as in Spain, where there is some unusual scenic feature, and then a way should be cut through the woods to allow it to be seen.

In the Spanish parks there are rectangular or circular openings in the midst of the woods laid out in a balanced design of beds which form shaded parterres. Here the Spanish have one of their rare opportunities to do a shaded planting and they handle them extremely well.

Some of these wood gardens have no flowers and consist of clipped Box planted to form patterns. The green is cool and restful, but where there are so many color effects to be tried out in the shade, it seems a waste of opportunity. We are so hungry for color in this drab modern world that we should have it wherever it is possible.

They may surround these openings with trees differing from the forest and may use Cedars or Palms in a Linden wood. Around one opening there was a double row of Plane trees, the branches cut off almost to the top so one could look up the tall height of their mottled, ragged bark to the little tuft of green at the summit.

If the parterre is sunken the slopes are sometimes mantled in a ground cover to make green banks. The parterre may be planted coolly in white and green and have white pillar Roses alternating with white Deutzia gracilis against a Boxwood background and all the pots along the paths filled with white Geraniums. Or the beds might be filled with a mixture of red-foliage plants and magenta, pink, and purple flowers, mostly Asters, which may sound awful to some but is attractive for those who like the brilliant dabs of color in modernist paintings.

In the shade, magenta is gorgeous. There has been much controversy about magenta among the ladies of the garden clubs. Like a taste for olives, one has to learn to like this much misunderstood color. The Orientals appreciated it and used it as a base for their embroideries and rugs. Some washed-out violet tones of it, such as show themselves in reverting Phloxes,

are not good, but the glowing magentas in Cinerarias, Rhododendrons, Bougainvilleas, and Primulas in the half light of the shaded woods have a fire and sparkle like rubies and amethysts. Perhaps this color is so flamboyant, so rich, and vibrating, that we are afraid of it, but as we outgrow our Puritan repressions we will gain courage and fearlessly use magenta.

For those who like pastel colors there are other combinations of plants. White Nicotianas, white Digitalis, and tree Ferns are good, and under spreading Hemlocks or Pine trees one could have drifts of pink and cream-colored Begonias, the single tuberous-rooted kinds, each color to itself, and through them other drifts of blue Ageratum. In spring there is the whole galaxy of bulbs either in pale tones or in reds, oranges, and purples. One can have both the delicate and the flamboyant schemes for contrast, but they should be set far enough apart so as not to be seen at the same time, or they will look like a Watteau shepherdess in her wide panniers of pastel-colored silks suddenly stepping out on the beach of the Lido strewn with modern maidens in the scantiest of costumes decorated with jagged cubistic designs.

As edgings and backgrounds for the shaded parterres they use Box, Hornbeam (*Carpinus*), Pittosporum, Euonymus, and Oleanders, which seem to grow in sun or shade. Box is the favorite, and at Aranjuez the whole park is redolent of its delicious fragrance.

Where there is constant watering, plants can be grown close to the trees and they sometimes have rows of annuals along the base of the tree trunks which, to my mind, look frivolous against the majestic denizens of the forest.

Hedges of clipped Hornbeam or Laurel under the trees form a green wall from the ground to the top of the trees in the French manner. This, however, shuts off the view into the woods. They sometimes plant shrubs without clipping them, such as Spiræas or Laurels between the trees,

spaced far enough apart not to hide the woods behind them and in spring their snowy blossoms shine out against the dark foliage. In one wood garden around a circular opening outlined by Plane trees there is a hedge of yellow green Pittosporum which brings out the color of the trees' mottled bark.

Even in the woods some paths are bordered with the ubiquitous pots, for the woods are formal gardens and often on the outskirts of a town and the scene of the evening stroll.

In these beauty-loving lands the evening stroll never takes place between rows of shop windows competing for attention, but always in an attractive setting either along tree-lined streets, on terraces overlooking inspiring views, or in the shade of fairy woods.

We Americans, too, could have fine walks where we might see the sun set, the moon rise, and skies twinkling with stars amid fragrant settings, but we must first be more coöperative and less competitive and do away with our electric signs, billboards, and other lures to the prospective spender.

GARDENING WITH POTS

Flowerpot, Un Brete

GARDENING WITH POTS

ANY one can have a few pots of flowers from the flamboyant Geraniums growing in a tin can on the ledge of a poor man's window to the painted Orchids in a luxuriant greenhouse.

It has been found practical to grow flowers in pots in countries where every drop of water has to be carefully hoarded, for a potted plant absorbs all the water it receives and none is wasted. The water should be sprinkled lightly as one walks past the row of pots and comes back two or three times so as to give it time to soak in. In the beds where the plants have to compete with heavy drinkers like the Box or trees they may droop with thirst even when they receive more water than they need to thrive lustily in pots.

Next to the tiles the most characteristic feature in the Spanish garden is the flowerpots. They are placed stiffly to accent certain points in the garden, in the corners of flower beds, on either side of a bench, or in serried ranks, all the same size and shape on top of a wall or roof where they have to be kept from falling by a wire stretched across. Still in their serried ranks, they outline a rectangular pool, or stand singly at each facet on the rim of an octagonal one. Where it is not possible to have Box edgings, pots may be used to outline the beds and border the walks. Moreover, they are not always arranged stiffly. The Spaniards excel in the art of placing the pots of brilliantly colored flowers casually, just as they seem to know instinctively how to wear their *capas* (capes) and *mantóns* (shawls) so that they form the thick, graceful folds of a Greek drapery. They encircle wells and cisterns with them, stand them on stairways, hang them from the balconies, and fasten them to the walls around the doors and windows. In fact they stand their pots—large ones, small ones, round or conical ones, pots shaped like oil jars, or urns

—wherever there is a level portion of the pavement or niche in the plaster walls.

In our gardens we do not often have appropriate places for standing them in rows and instead can space them a few feet apart and arrange them either in pairs to balance each other or in groups of three, five, or seven. In informal arrangements the uneven numbers give better effects than the even. In front of a trellis they should not be close up to it, but stand a few feet away to give the effect of distance.

As you look down a passage whose walls seem green with pots of Asparagus and Maidenhair Fern or into a patio brim full of Azaleas from white through deepening pinks to red, you wonder how the magic effect is accomplished. Upon studying it you may find there are, in reality, only a few pots, but they are placed with so much skill that they give the impression of bloom filling every corner.

In rainy countries, where it is possible to have filmy drifts of Phlox, Iris, or Peonies in the borders, it seems foolish to grow potted plants which require daily watering. But by growing plants in pots we can have exotic flowers which can easily be moved indoors and wintered in the cellar without disturbing the roots. Then, too, pots are safe receptacles for rare plants which might be lost in the border. In Northern gardens we like a few pots of Tuberose or Heliotrope even though they shrivel up at the first breath of frost, for they remind us of a romantic journey taken in our youth when the fragrance of the Orange blossoms and the golden sunshine seemed to exist just for us, or they recall a garden on Lake Como visited when we were older and the mind freer to notice and remember the creamy stuccoed house embowered in pink-blossomed Oleanders, and masses of purple Heliotrope at the feet of the blue Plumbago climbing up the wall.

It is not only Southerners transplanted to the North who have a long-

Stairway, Alcazar Gardens, Seville

ing for the South. The Germans have expressed this in poems and songs. In Nürnberg in front of an inn famous for its beer and sausage, I was amused to find two carefully tended tubs of Oleanders probably brought home from a wedding journey in Italy, looking a bit anæmic and strange in the Gothic surroundings.

Pots are useful as fillers-in. For deaths and emergencies which occur in even the most efficiently organized garden the breach can be filled instantly by slipping in the contents of a pot. When the garden begins to languish after the Lilies have dropped their segments and before the Phlox has burst into its cheery colors, then the potted Oleanders and Agapanthus come into flower and glorify the terrace with their pink, blue, and white blossoms.

With pots of Lavender, Carnations, or Lilies one can improvise a fragrant setting for a dinner out-of-doors under the stars.

Potted plants give us a flexible garden. We can play with them and move the color schemes and accents about and compose a garden of brilliant colors to-day and one of green-foliage plants next week. If it is not a success, you just lift the pots and try something else. If there are several sets of pots, as they have in Spain, of varying colors, shapes, and sizes such as a whole set of blue to alternate with white ones and another set of yellow ones and perhaps a set of pots painted in flower or animal designs, one can change the appearance of the garden overnight. For if there are blue inserts in the tiled walks and you stand blue pots around they will emphasize and bring out the inserts, whereas if you have pots to match the earth-colored tiles you almost forget the inserts.

As all gardeners eventually select certain annuals and perennials as the mainstay of their borders with only a few diversions for experiment, so certain flowers have gradually been adapted to fill the pots in a seasonal sequence. In the fall come the Chrysanthemums, and then in turn Cinerarias come in March and April, Carnations from April to June, while

Geraniums are used for all seasons. These are the plants most commonly grown, but one may find patios gay with Heliotrope, Azaleas, Calla Lilies, Tuberoses, and other flowers.

In pots placed in the garden the annuals are not planted as often as they are on the balconies, probably because they do not want color so much as more lasting, fragrant green. The pots can be filled with several plants at a time such as Tulips and Violas or Roses and Forget-me-nots in the spring and later with a combination of pale gold and orange Calendulas, purple Petunias, and Ageratum, although one seldom sees two or three kinds of flowers in the same receptacle in Spain. When the plant is wide and branching it is best alone in one pot, but when the smaller annuals are used a mixed arrangement is less stiff. Often, especially during August and September, the pots are filled with green ferns and Aspidistra or with the fragrant-foliaged plants such as Myrtle (*Myrtle communis* and other varieties), Rose Geranium, Sweet Bay, Sweet Basil, and Lemon Verbena, which last for years and only necessitate a yearly renewal of earth, as do the gray-foliaged plants like their favorite Dusty Miller (*Centaurea cineraria*), and the Artemisias. Bamboo and Papyrus, both graceful and feathery, and the dark, shiny green English Ivy are grown in pots and trained against the stuccoed walls. In jardinières the green plants, especially when their leaves are lustrous like Euonymus or Pittosporum, stand out against the tiled pavement whereas they would merge into a lawn or grass path.

In a grassy garden both earth-colored or glazed pots are striking and bring color and life when there is a temporary lull in the bloom. Italian oil jars are now so embellished that their humble past is quite forgotten. Without any flowers, and filled only with pebbles to weight them down, they can be used as accents to mark the entrance to the garden, colonnade, or tea house. Pots of fragrant-leaved plants standing on a stairway or right in

the way of the path where one has to brush them and stir their fragrance into the air are amusing too.

In Spain there are whole nurseries in pots; the seeds and cuttings are grown in them, and even the cabbages and lettuces. Under a broad, shaded alley of trees I saw thousands of flowers growing in pots, each variety and color kept to itself, making great sheets of color. In the botanical gardens, Cacti, Agave, and other desert plants, which must be kept particularly dry, are grown in pots standing on other inverted ones to keep them off the ground and let the air circulate about them.

On market days in Spanish villages one sees almost the same unglazed pots spread out for sale on the square before the cathedral now dedicated to Nuestra Señora Maria de la Concepcion as when the square faced the temple of Artemis twenty-five hundred years ago. We can buy practically the same pots as Hannibal had to equip his army and the Romans carried on their expeditions into Germany and Belgium. These humble kitchen utensils bring the past very close, and when we note that in the country around Valencia and Sagunto the styles in sandals have not changed since the days of the Greek colonists it makes us realize what a young civilization ours is.

The Spanish flowerpots available to-day trace their ancestry back to the Greek settlements along the coast, but there have been many intermarriages since then and the shapes, the glazes, and decoration of the pottery have been influenced by the work of other lands. However, the foreign influences filtered in slowly, and when the people were isolated from the outside world for centuries at a time, they absorbed these importations and merged them with their own work so that all their pottery gradually developed a family resemblance.

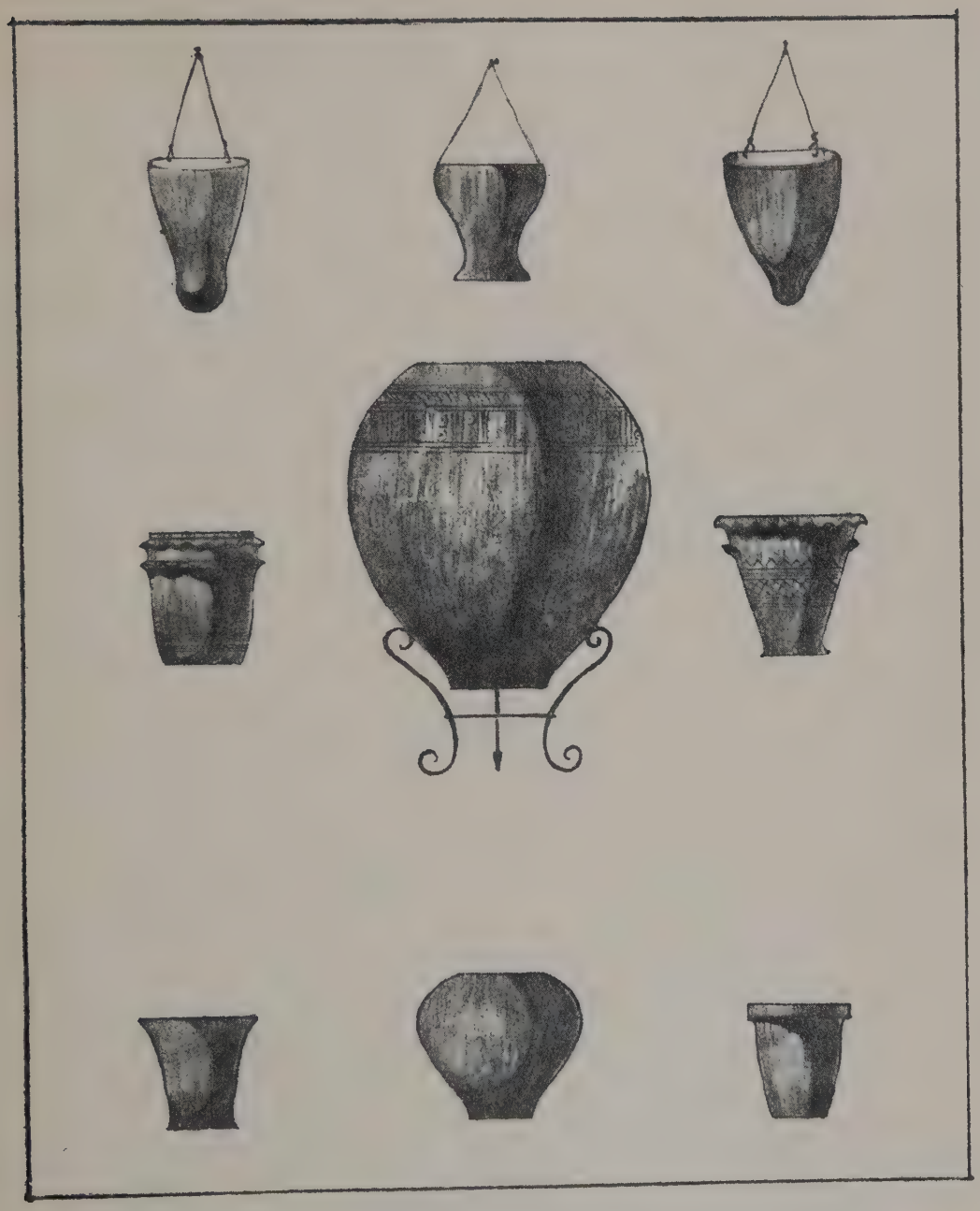
Rural Spain has not reached the modern plumbing stage of civilization and the women still fetch the water from the village wells. In each district there is a distinctive water jug not so very different in shape but

with some local custom of placing the handles or dabbing a bit of green or blue near the mouth. The fashion of carrying the jars varies according to their shape, and as all the jugs in one village are alike so the women carry them in the same way, either on the right shoulder supported by the left arm, propped against the hollow of their waists, or on their heads resting on a little cushion. They walk along with a stately grace, swinging their hips as they go.

In Spain there are so many beautifully shaped containers, the *cazuelas* (cooking pots), the *jarros* (pitchers), *albarallos* (medicine jars), and the great *tinajas* (wine jars), that it is difficult to eliminate them from this chapter and keep to the true flowerpots in the garden.

In America to-day jardinières come into our gardens from potteries in all parts of the world. They arrive in bewildering numbers and varieties. I often wonder how the archeologist, thousands of years from now, when he digs into the ruins of New York, will explain finding bits of Persian, Chinese, Rhodian, Italian, or Peruvian jars all crumbling together in what was once a back yard garden.

Excellent pottery is made in America at present. Drinking cups, mixing bowls, wine and oil jugs from the museums are used as models for pots and adapted to suit our taste and harmonize with our building materials, and in time a typically American style of ceramics may grow from these beginnings. At present the good pottery is very expensive, and there is no cheap and attractive native pottery for the garden. For although we can hurry along everything else, we cannot force the artistic expression of ourselves if it is to be sincere. Until we have our own we are dependent on importations and reproductions and must exercise a little discretion about the way we combine them. The Far Eastern ware, the Chinese and Japanese do not combine well with the Mediterranean, nor does the fine Italian go with the coarse Mexican. Handmade clay pots make heavy cast concrete



Unglazed Spanish Flowerpots

ones look clumsy. Spanish and Italian ware go together well and so does the North African with either of these.

To be practical a flowerpot must not be too tall for its width or supported on a too slender base, but be so balanced that when it is filled the weight of the earth will hold it down and prevent it from crashing to the ground at the first windstorm. There must be a hole at the bottom large enough to give free drainage and the mouth must be wide enough to give the plant air. Palms are grown in oil jars, but in general their mouth is too narrow for plants. Low, shallow bowls do not hold enough soil to permit strong roots to be formed, but are good to grow bulbs in. The pot must be the right depth in proportion to its height. 20 inches across by 18 inches high with a base of 12 inches diameter is solid looking as is 10 inches by 9 inches with a base of 7½ inches. Pots in American gardens must be larger than for the small Spanish houses and walls. Too small a pot looks insignificant.

A flowerpot bearing the marks of the coils or of the thumb and fingers which drew up the clay and shaped it as the wheel spun around has something personal about it, as all handmade things have.

The greatest number of pots used in Spain are of unglazed clay, and the common shape is a cylinder widening toward the top and ending in a flaring brim. The unglazed pots are best for the plants, as the glaze interferes a little with the free circulation of the air. Like the tiles, they are made in each district and are either golden brown, red, or tannish gray, according to the soil. The longer the pot is baked the paler it grows, but if it is only baked a short while, it keeps a rosy, uneven flush, each one blushing differently from its neighbor. With their crescendos and diminuendos of rose playing on the colors of Mother Earth, they are far lovelier than the glazed ones, all an even tone. In dry countries the pots do not grow moldy as quickly as they do in damp climates, but generally

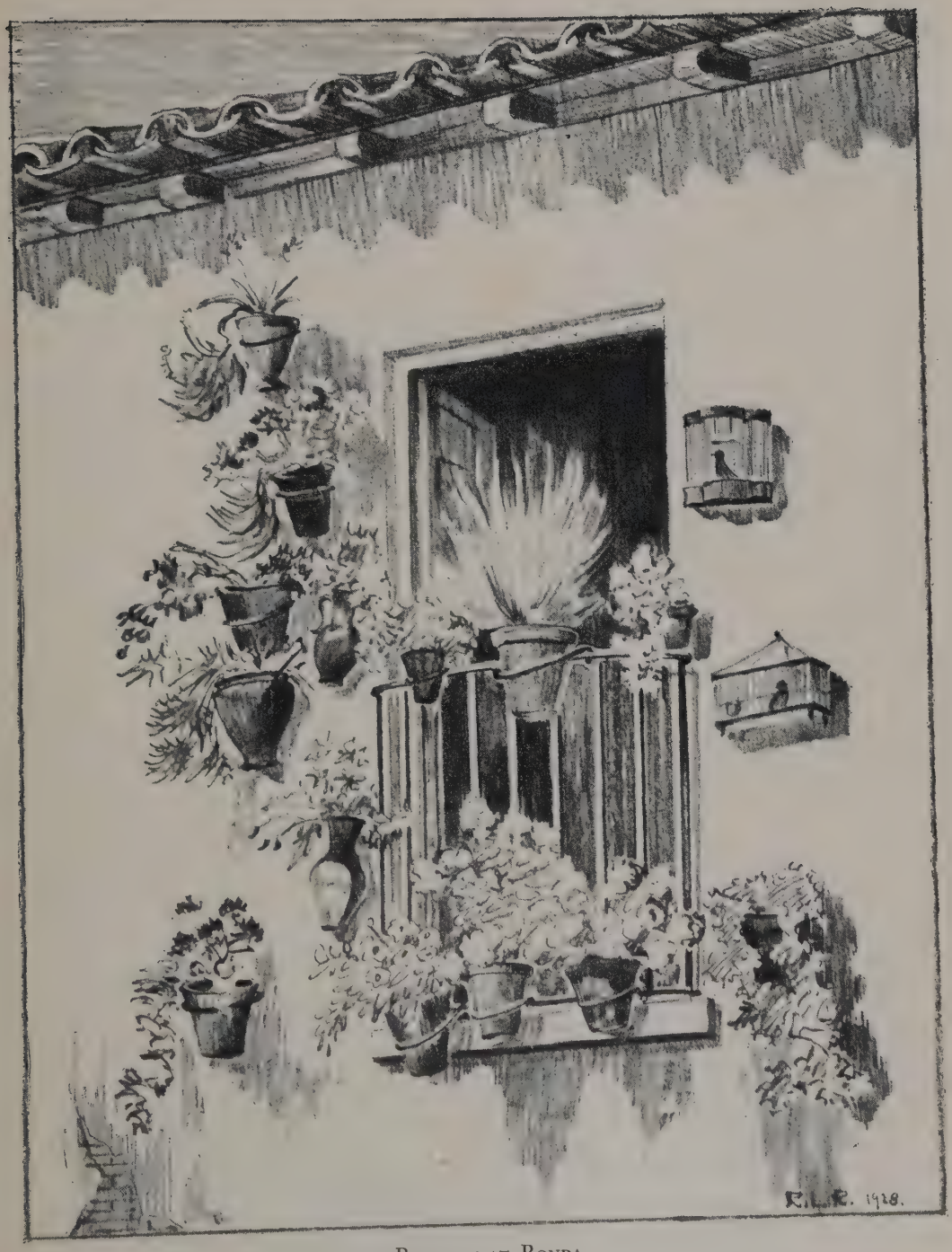
keep their exquisite coloring until the fatal crash at the end. Slimy green mold does not enhance them, according to my taste.

The Spanish are such poor packers that we will never be able to have great numbers of their pots as we do of the Italian or Sicilian, which are handsome too.

Some of the Mediterranean pots have a single wavy fluted edge or sometimes a double one like a frill or ruffle which is made by pressing the thumb down at intervals on the wet clay. These uneven brims cast shadows which embroider the surface, and when the pots stand on the edge of a pool the light from the water is refracted onto them in shimmering, dancing globules.

The Spanish have several shapes for hanging against the walls. One is copied from a mosque lamp and is a spreading cone. Another shape like a cylinder with a pointed base is flat at the back, and was probably copied from a roof tile cemented against the wall, which they often use to hold plants. There is a flat piece attached at the back of some pots to hold them flush against the wall. The hanging pots are also rounded at the base, and vase shaped, and sometimes they have holes on the side against the wall where they do not show instead of on the bottom. In Cordoba, where there were many interesting old shapes, the pots were marked around the rim with three or four rows of zigzag design scratched into the clay with a tool, quite like the edge of the basin in the Patio de Daraxa at the Alhambra.

As I have noted before, in Spain the pots are often painted to match the scheme of the patio or contrast with it. This is done by daubing the unglazed pots with water-color paint like the houses or by having the pots glazed and baked a solid color, such as light or dark blue, yellow, black, or white. On glazed pots they also paint scenes of animals, so vaguely that one is never sure whether they are hares or bulls, in caramel, green, and blue on a grayish white ground and have bands of these



Balcony at Ronda

colors around the top and bottom. The decorated pots are very gay and run from tiny little four-inch size to huge jardinières thirty inches across the mouth. The old Arabic pots often had "Felicity" or "Blessings" written on them in Cufic (Arabic) letters.

At the "Exposition des Arts Décoratifs" in Paris in 1925, little pots made in Marseilles were set up by the thousands. They were designed by Monsieur Forestier, under whose direction the gardens were planned, and were very like the Spanish in shape and color, only a little heavier and more stolid looking. Potted plants are admirably suited to the needs of an exhibition where the crowds of people cause the flowers to wilt quickly and in Paris they were replaced every fortnight. Where everything was put up in a hurry and there was not time for plants to become established in the ground, the pots brought a profusion of healthy-growing plants and added enormously to the color and beauty of the exposition.

Throughout the English exhibits there were squared or round wooden tubs gayly painted in green, black, and gold or in orange and red in modernistic patterns. They held Myrtle or Boxwood clipped in pyramids and standards and served to bring growing plants in among the lifeless exhibits. It is now a recognized fact that plants in museums lessen the fatigue of the visitors.

Plants in pots are frankly transient and need only bring forth a generous blaze of bloom all at one time. Then having given of their loveliness they are spirited away. Even when the pot is filled with Privet, Retinospora, or other green plant, they do not remain forever.

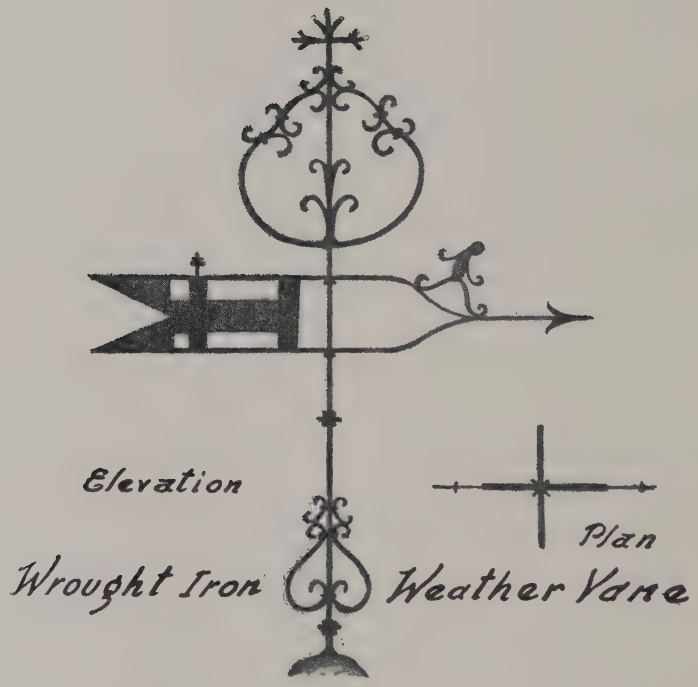
With a few pots one can evoke a garden on a window ledge, on a terrace, climbing up a stairway, or flanking the entrance of a house. Potted plants at the entrance and on the window sills lend an air of hospitality to a house. They attract patrons into restaurants and lure the unwilling purchaser into a shop. They are particularly useful in cities where the

earth is either completely covered over or too poisoned with gas and oil to yield nourishment. On paved terraces and courtyards they lend the informality of their flowers and foliage to the rigid stones of the architecture. There is something friendly about a house embellished with pots, and in foreign countries, when I have to ask the way, I go to the house which has potted plants in the windows, for any one who loves flowers enough to grow them in pots will be kindly and agreeable.

When you tend a plant in a pot, you come into intimate relations with it. You water it, stir the damp, fragrant earth with the end of a stick, and stoop to break off a dried leaf or withered blossom and so inhale the scent from the leaves and flowers.

In a pot a plant is set apart like a queen on her throne, for flowers, like beautiful women, look best when each is in a frame by itself. So the discerning gardener who likes to show off his plants to their best advantage will have as many potted plants as he can place without making his gardens and terraces look crowded.

LIMNED AGAINST THE SOUTHERN SKY



WROUGHT-IRON WEATHER VANE

LIMNED AGAINST THE SOUTHERN SKY

ALTHOUGH it is five hundred years since the Arabs left Spain, when we look through the gate into an old garden we can almost see a turbaned gentleman in flowing robes and heelless slippers walking around and around his Rose of Sharon bush, his eyes never wavering from the rosy blossoms. For this is the way to banish melancholy according to Ibn Al Awam, who wrote "The Book of Agriculture" in Seville in the twelfth century. Another Hispano-Arabic book which has come down to us was written by Ebn Baithar, a famous botanist who lived in Malaga in the eleventh century. His book is a herbal and contains descriptions of the appearance, culture, and medicinal uses of the plants collected by the author on his many trips from Malaga to Bagdad, where he went as frequently and easily as we commute to Europe to-day. It is because of these books and the one called "History of the Mohammedan Dynasties in Spain" by Al Makkari in the sixteenth century that we know about these gardens which covered the hills and valleys of Southern Spain with delicious fruits, sweet-smelling flowers, and limpid-running waters and transformed the land into a terrestrial paradise; which Al Makkari says God gave to the Christians to live in since entrance to the celestial paradise was barred to them in the hereafter. Only a few fragments of the old gardens are left and many of these are cluttered by unwise restorations; but from these fragments we can see that the originals were unrivaled gems of garden art.

The Arabs wrote poetry and wove romances about their beloved gardens. The following story told by Al Makkari might be called the "Romance of Landscape Gardening": Abdurrahman III, who reigned in

Cordoba early in the tenth century, built the fairy-like palace of Medina Az Zahra on the hills outside the city for his favorite, Az Zahra, and named it for her as many a merchant prince names his villa for his wife to-day. When she saw the marble buildings sharply outlined against the dark-foliaged evergreens which covered the hillside as with a gloomy cloak, she is said to have exclaimed rather naughtily; "Oh, Master, how beautiful this girl looks in the arms of yonder Ethiopian." The sultan, his jealousy aroused, commanded his vizier to remove the mountain at once. However, his advisers, among whom was probably the architect, trembling at the threat to his cherished buildings, persuaded the sultan not to take down the mountain but to remove the evergreen Oaks and other trees and replace them with Fig and Almond trees instead. This was done and the changed landscape was now cheerful instead of gloomy and was particularly charming, as Al Makkari says, "in spring when the trees being in full blossom spread in the atmosphere a fragrance and freshness that were quite delightful." The Fig and Almond trees were chosen, although they are bare of leaves so many months of the year, because they permitted glimpses of the golden earth patched with magenta (as it is near Cordoba and at Jaen), through the gray trunks of the trees.

One of the ever recurring dramas of the world is the decline of succeeding civilizations, which rise, blossom, fade, and fall. In time the refined Arabic culture was to end, the gardens and palaces, baths and mosques were to be ground to bits. Yet fortunately their agricultural science was not lost, not even when Cardinal Ximenez, to show his religious fervor, ordered seventy thousand manuscripts burned in the public square after the conquest of Granada. The peasants continued the Arabic ways of cultivating and watering the soil for some time in the South and still do in the East at Valencia, which is the best cultivated province in Spain. These methods of planting and irrigating were carried to the Americas by the missionaries,

who taught the Californians how to make their desert blossom as a Rose, and built gardens in Mexico like the ceramic patios of old Spain.

Ibn Al Awam's principles of landscape gardening are still followed to-day. He said the garden should be in one piece (I presume he meant it should not be divided by roads), so that the water could be carried from the highest point down through the whole enclosure to the furthermost corner. Deciduous trees should not be intermingled with evergreens. Near doorways, pools, or reservoirs the Laurel (generally the Oleander is meant), Myrtle (*Myrtus communis*), Cypress, Pine, Orange, Jasmine, Bitter Orange tree, and others of the same type would grace the situation. The Pine was to be placed where thick shade was wanted, such as the center of parterres, and the Cypress planted in alleys and in the corners of beds. For planting close to wells and reservoirs he recommended Mountain Ash, the Elm, the Lombardy Poplar, and the wild Pomegranate. He said water could be kept cool by building trellises and arbors over it. Toward the north of the garden, where they would cast a good deal of shade, trees should be planted such as the Pine, Elm, Willow, and others which were stood against the enclosing walls. The same varieties were planted toward the setting sun, for their shade would not harm trees in the garden nor the greens. Rosebushes should be placed off to one side of the garden (in the spaces between the trees).

Flowers were not important in the old Arab gardens, probably because they did not have the fiery Bougainvilleas, the brilliant Cinerarias, or scarlet Hibiscus, which flame in the Southern gardens of to-day. The principal planting was of green and, whenever possible, fragrant green.

They were skillful in combining fragrant plants. Upon entering the garden the first scent might be a faint one from the Rosemary, and as you walked along the fragrances would increase in intensity until you reached the Jasmine and Tuberoses against the wall; or they might have a bitter-

smelling plant like Wormwood, and even a disagreeably scented one like Marigold to alternate with the sweet ones; or alternate the spicy scents of Carnations with the sweet scent of Violets. They were so fond of clipped Box, Myrtle, and Bay that they delighted in laying out mazes of these, and almost every garden, we are told, had a maze of some kind.

The severity of the velvety, almost black, Cypresses against the white walls was softened by placing a flowering Almond, or Peach, close to it, or by twining a rose vine about the dusky tree. Against the walls, trees were planted or vines to clothe them. Off in a corner, bending over a well or in the center of a bed, as Ibn Al Awam has told us, there would be a tree for its shade, perhaps a Pomegranate with its large pinkish red fruits, a Fig with its decorative leaves, an Orange, or a Lemon. Pears, Plums, Cherry, Apple, Pistache, Quince, and Almond trees were known to them. For accents, on either side of an entrance or in a corner, they would plant a Lombardy Poplar or date Palm, a Cypress or Juniper. The bushes were Oleanders, Hawthorns, Holly, and surely the Judas tree (*Cercis siliquastrum*). They had white, yellow, red, and flesh-colored Roses, the China Rose, and the Damascus Rose. Ibn Al Awam mentions blue Roses, but as he also tells how to color flowers by inserting chemicals into the stems, this may have been what he meant. It is, however, more likely that he had some other flower in mind.

For fragrant flowers they had Lilies (the Madonna), Gentians, Stocks, Violets, Saffron (*Crocus sativus*), Narcissus, Jonquils, Hyacinth, Wallflowers; yellow, white, and red water Lilies, Verbena (used to feed the doves), Hemerocallis, Cyclamen (a fragrant kind), Calendula, and others. They grew a long list of herbs for medicinal and other purposes. For flowers without fragrance they had, among others, Salvia, Forget-me-nots, Hollyhocks, and Poppies.

The effect which met the eye was of a softly undulating green, nor

Double Cypress Arches, Alcazar Gardens, Seville

were the other senses neglected, for there was the murmur of running waters, the perfumes of scented flowers, and a cool green bower under which to rest and enjoy oneself.

Monsieur Forestier told me the flowers were not brought from the cold-frame (or nursery of pots) and bedded out, but a mixture of seed of many species was broadcast over the beds. If Allah willed, all the seeds would mature and the square would be a little meadow dight with bloom, like the ground of a Persian rug, or foreground in a tapestry. The mixed colors and forms would riot over the surface to be kept in order by the rigid lines of trimmed hedges or other boundaries. But whatever the intention, to judge from present-day practice in Spain, the results were as might have been expected from such fatalistic gardening. Much of the seed does not germinate and the few that do come up casually as if they had been blown in by mistake. An expanse of well-cultivated brown earth is thus left bare and not carefully covered up, for the fruitful soil is a delight to those whose eyes have become weary from looking at sandy deserts and dusty highways.

The old Arabic garden probably resembled the topiary garden of the Romans and was very like the Persian gardens after which it was modeled. However, as in all forms of Spanish art, the gardens had a decided Spanish quality, which showed itself in the individual handling of details and the intimate personal feeling of the whole.

It is possible that the gardens of Southern France derived inspiration from the Spanish and handed on this influence to the first gardens in Northern Europe. Later, when the Netherlands became a Spanish colony, the Dutch gardens acquired a Spanish flavor which was carried to England by William and Mary late in the seventeenth century.

Just as we rebuild Pompeian courts and Egyptian tombs in our museums to show how the people of the past lived and died, so we might rebuild the old gardens; for gardens of any period reflect the tastes and social life of

the people who lived in them. In recreating a garden in the style of Gothic France or Renaissance Italy, it should be furnished with the trees and shrubs grown at the time, for the character of the gardens was determined largely by the plants. Mimosas or Eucalyptus trees which were unknown in Europe at the time would be as out of place in a mediæval garden as a Chippendale chair in a Pompeian court. Period gardens would be especially appropriate adjoining museums. The entrance to a museum of Old New York could be laid out with trim Box-edged beds filled with Tulips in the fashion of the Dutch colonial gardens; leading the way to a thirteenth-century cloister brought from France there could be an architectural garden furnished with practically the same plants as grew in the Arabic gardens. Yet strange as it may seem in one such garden, the curators in charge, although they can surely tell the age and nationality of a hairpin or shoe buckle at a glance, know so little about the history of landscape gardening that they have laid out naturalistic winding paths bordered with Mountain Laurels and Dogwoods (*Cornus florida*)!

Similar anachronisms have been perpetrated in the gardens of the Generalife at Granada, laid out by Moorish gardeners in the thirteenth century, where Michaelmas Daisies from North America and Dahlias, first brought from Mexico by the Conquistadors, sprawl in the tiny Box-edged beds to-day. Here the flowers are unsuitable in height and size of bloom as well as being out of chronological order.

Whether you plant your garden with fragrant green shrubs like the Arabs, with Alpines, or with weirdly shaped Cacti, must depend on the character of the growth on the hills and meadows outside the enclosing walls. Unless the plants harmonize with the color of the sky and bear a strong resemblance to the native trees and shrubs, the garden will look as if it might vanish any moment and not as if it had permanent roots deep in the soil.

In order to survive during the past ages, the plants adjusted themselves to the physical conditions they had to meet. In the deserts they developed leathery leaves to conserve the moisture, and in the rainy jungles, wide, soft ones to evaporate it quickly. Therefore, when inhabitants from the sun or shade, the heat or cold, high altitudes or deep valleys, are given a location suited to their physical idiosyncrasies they will thrive. Besides, plants adapted to the climate look handsomer than any others. The greeny gray foliage of the Eucalyptus, the Sages, and Tamarisks seem just the right color note against the golden sands of the Texas plains and Mediterranean coasts, while dark, pyramidal Hemlocks, shaped like pointed mountains, are the right form and color to encircle the Canadian Rockies or Swiss Alps. Lush green Maple, Ash, or Oak trees belong to green scenery and pale blue skies, while the brilliantly flowered Poinsettia, Camellia, and Mimosa must be limned against the dark blue of a Southern sky.

In gardening there is a complete freedom from national bonds and the only determining factor is the climate. Whether the land is ruled by a king or a dictator has no influence on the trees and flowers, but rocks and beaches make a difference and so does wind. With the easy transportation and constant exchange of seeds, bulbs, and roots, gardens in the South of France, Andalusia, California, North Africa, or Australia are planted with the same trees and flowers and therefore look alike. With all the riches of the floral world to choose from, unless we have a museum garden, there is no point in limiting ourselves to plants cultivated from the eighth to the fifteenth centuries in Southern Europe; for the gardens we build to-day must express our tastes and way of living just as the old ones did in their day. However, in building a Spanish garden where the scheme was so strongly influenced by the available plant material, it is wisest to keep to the spirit even if we change the letter of the law, have much fragrant green, and in the beds inconspicuous flowers or low green ground covers, and splurge with the

gorgeous new plants from South Africa, China, or Mexico in pots and vines against the plastered walls.

In the small garden, whenever a new plant is introduced an old one must be sacrificed, so it is best to keep to the same Box, Pomegranates, and Oranges, Tuberoses, and Jasmines we know look well and experiment with one or two alluring new plants a year. Few of us think of making radical changes in the living room each season and yet we like to buy an antique chair or piece of pottery once in a while for variety, so in the garden it is amusing to add a Strelitzia, a Datura, or Bouvardia seen in a neighbor's garden or near-by nursery.

In the little space enclosed by walls, the slender trees with dainty appetites, like Pines, Cypress, Cedars, Junipers, and Palms, are suitable. They leave room for other planting and have deep roots which go straight down and permit one to plant annuals about the base of their trunks. A branching deciduous tree with its spreading mats of roots, like a Plane or Maple, in a small garden will fill the entire space and absorb all the nourishment and make it impossible to have anything else. The trees in these restricted gardens, like babies in apartment houses, must be tidy and not drop seed and buds all over the beds and walks unless they fall gracefully like the white petals of a Pear tree snowing against the blue of a summer sky.

Small, slender plants in a garden make it look large, while fat, spreading ones dwarf it. If there is a space between the plants it gives a sense of ease and roominess to the garden, whereas if they are blotted so closely against each other that their shape is lost, even a large garden will look crowded.

Perennials are usually too tall and bushy and only a very few, if any, can be used; the low, early biennials would do as far as size goes, but have such a short season of bloom that it is wasteful to give up space to them. The slender solitary Lilies, which—alas!—seldom grow bushy, can be

slipped in anywhere; candidum and longiflorum do well in Southern climates. Yuccas and Aloes are exclamation points, as are Cypress and Lombardy Poplars, and if we do not want an ejaculatory garden, they must be used sparingly.

As for Cacti, there is place only for one or two of the large ones. They are handsome and fit into the landscape, but if we keep to the spirit of the Spanish garden, we will not bring the desert into the walled enclosure, and will plant them outside in front of the house or walls.

There are three ways of planting the flowers in the beds of a small garden. One is the Arabic way of mixing all colors, shapes, and varieties, a living "millefleurs," an effect so beloved by the artists of every land that they printed it on their chintzes, painted it onto the pottery, and wove it into the textiles. The Arabic way is the most fun for one who does his own gardening, for it gives him a chance to grow each of his twenty favorite flowers in their several colors. When a flower sickens or dies he can replace it with anything at hand without worrying about color schemes. For millefleurs bedding the dainty, low-growing annuals to be used are the Larkspur, Dimorphotheca, Phlox drummondi, Candytuft, Antirrhinum, Nigella, Petunia, Heliotrope, Nasturtium, Salvia (blue), Stocks, Wallflowers, Nemesia, the Verbenas and Vincas, and the twins Sapliglossis and Scabiosa dressed in their mid-Victorian velvet gowns. The California wild flowers, such as the Lupines, Godetias (in gorgeous colors), Clarkia, Schizanthus, Nemophila, Platystemon (Cream cup), grow easily from seed. One could use California Poppies (*Eschscholtzia*) as ground covers in the colors Burbank has given us, the pink, cream, rose, and the natural golden orange. The Shirley Poppies in their reds and pinks are lovely too. Along the edges of these beds the spring bulbs could be sandwiched in, such as Snowdrops, Crocus, Scilla, Freesia, Cyclamen, and the dainty species Tulips (such as *Clusiana* and *Kaufmanniana*). Ranunculus and Anemones are charming

in borders to themselves. One cannot cultivate beds planted like this for fear of cutting short the life of a seedling, but if the flowers are close enough to shade the ground few weeds show their undesirable heads, and these can be pulled out by hand.

Mixtures in dainty colorings look best in a setting of green foliage plants where the pavements and accessories are in quiet colors; they do not blend with brilliantly colored tiles or where Cinerarias and Geraniums are planted in the pots.

The second way of planting the flower beds is the French way, and, as in everything they do, it is generally in exquisite taste. Formal rows of plants are bedded out graduated in tone and height like a striped ribbon, a ribbon where each stripe is higher than the last; in depth of colors halfway between the bright Roman sash and soft-toned Oriental gauzes. They wind these ribbons around the statuary and garden houses or spread them out to border avenues lined with trees. Skill and forethought and a coldframe or hothouse as a reserve are required to carry these out successfully.

At the base of a statue in the Luxembourg gardens in Paris one June morning, I saw a gardener in his blue smock and official red cap first plant a narrow line of purple Violas, then a broad one of yellow Violas, and throughout these last he had Chinese Delphiniums raise their sky-blue flowers. The usual beds are composed more or less as follows: first a thin line of blue Ageratum (A), then dark violet Verbena (B), then light pink Begonias (C), then dark rose-colored ones (D), and in the center a high line either of standard Roses, Altheas, or Dahlias. The middle row will have alternating pink and yellow Roses, or pale pink and deep rose-colored Altheas. Then on the other side of the center the lines repeat in the reverse order, D, C, B, A. One fall, in Paris, there was a gay border all of yellow, orange, red, and white, consisting of white Daisies, yellow and orange Calendulas, single brick-red Dahlias, and orange Marigolds, and in the

center tall orange Dahlias alternated with tall dark red ones. It was especially delightful against the gray of the city streets and buildings. For a bedding in the shade, also in the lovely Luxembourg gardens, I once saw a Box edging, then low red and white Fuchsias in a broad line, and through the center were standards of purple and red Fuchsias. But few of us have the skill or the taste of these floral artists, and when we bed in the French fashion we are apt to give it a Puritan gloom and austerity, not because we wish to but because we lack the dash to do otherwise.

A third way of planting a border is to have drifts of one species melting into a drift of another in harmonious colors and soft curves like waves lapping on the beach. This is not appropriate for a small garden except where there is a fairly long border against a wall and then only in moist climates, as the ground close to the wall is apt to dry out quickly.

The English way is to combine the Arabic and the French. They mix their flowers in height and color, but have accents repeated throughout its extent.

Each method is good in the right place. The French fashion is restful, impersonal, and perhaps, therefore, more classical than the individualistic millefleurs. It is suitable for public gardens and in beds bordering the walks of a city street around a railway or gasoline station, or other architectural features and buildings, while the Arabic or millefleurs is ideal for the small garden where as large a variety of plants as possible is desired.

For a quiet effect, or one requiring little attention, one can have a shrub or tree in the center of the bed and cover the ground with low green plants. If there are four beds, there might be two shrubs of one kind and two of another opposite each other, two Lagerstroemias and two Exochordias, Pyracantha with Camellias or Gardenias with Oleanders. Roses not pruned but allowed to grow as bushes give a long season of bloom. Mrs. Martineau in her excellent book, "Gardening in Sunny Lands," says Paul Nabonnand

and Papa Gontier (both pink), are good. Almost any tea Rose can be used as a bush in these gardens. A single tree or shrub is often planted in the center in the small patio gardens.

For ground covers there are Violets, Pansies, Vinca, dwarf Cotoneasters, Portulaca, Sempervirums, Sedums, Echeverias, Cotyledon, Crassula, Lippia repens, Mesembryanthemums, Japanese Grass, and English Ivy. Whenever it is necessary, they are clipped low to look like grass-covered space.

In the Spanish garden there is no grass, as has been said before. In a hot, dry climate a lawn is the height of luxury and in one Spanish garden belonging to a grandee it required eight men to care for two acres of lawn and perennial borders. Emerald lawns do not look well in a desert or in tropical scenery, but if you must have them and nothing less will satisfy you, it is possible to lay pipes under the lawn and install a system of underground sprinkling as has been done in California. In the botanical gardens of Spain they show various Japanese and other Grasses which will stand the heat and drought, and a great deal of experimenting has been done with ground covers. The garden of Villa Carlotta on Lake Como, which is not very large in size but long in fame, is planted in Japanese Grass (*Carex morowii* or *Carex comans*), which grows about six inches high and is not cut. Como is green and blue, so grass goes well with the scenery, but Spain and California are all gold and blue, and why try for lawns, which seldom look well, when one can cover the ground with tiles or pebbles in interesting patterns and colors?

In the large Spanish gardens and along the paseos there are some original combinations of trees and shrubs. A walk lined with lavender-flowered Judas trees (*Cercis siliquastrum*) has a low border of purple Iris. (There are pink and white Judas trees for the South as well as the lavender.) In a garden a Yew hedge cut to form a series of bays had each bay filled

with fluffy pink Almond. On the seashore a row of Palms alternates with Oleanders; Pear trees have Roses festooned from tree to tree; Lilacs alternate with Spiræa van houttei or with bush Roses in an unclipped hedge. This alternating of tree and shrubs with each other suggests further possibilities.

In one garden the orange Lantana was boldly planted beside magenta Bougainvillea; and in another Bougainvillea with blue Plumbago; clumps of Oleanders on a hillside at Barcelona had each color, the white, the light and dark pinks, kept separate.

Violets under Roses are seen all over Spain, and what a delicious scent they give!

Orange trees in beds bordered with Myrtle (*Vinca minor*) cross through the Rose garden and bring the green to set off the red, pink, and yellow blossoms.

If one's garden is out on a ranch far from a market, it is sensible to have a few vegetables. One can fill the beds with vegetables and have the flowers in pots. Carrots make neat outlines to beds, and Artichokes, with their silvery incised leaves, are handsome on either side of a gate. Scarlet runner Beans could be swung over archways and trellises, where they would be decorative instead of climbing up the everlasting poles laid tentwise like a diminutive Indian village. All the Squash and Melon family have good-looking fruits and can be grown as decorations. The foliage of Cabbages, Broccoli, and Brussels Sprouts is good and looks neat when one kind fills the whole bed.

In Southern lands there seem to be even more distinctions and subtle divisions of the climate than there are in the North. As I have not gardened in any of these delightful spots, but have merely passed through lingeringly as an admiring visitor, I cannot give planting lists, for in order to do this one must be thoroughly acquainted with the vagaries of the soil and rainfall in a given locality. I have merely suggested planting from the

beautiful arrangements I have seen and hope that the reader, who is a prospective gardener, will go to the nearest nursery or experiment station to get his catalogues and bulletins and find out what he can or cannot have in his own plot of ground.

THE PERFUMES OF ARABY

Wooden Garden Door, Granada

THE PERFUMES OF ARABY

"God has given us a placid and beautiful night, we have seen the cypresses of Maumal
Inclining their heads before the mountain breeze, the sweet perfumed gales that smell of gilly flower,
The dove singing her love on the branches of the dauh and the sweet basil inclining its boughs to the limpid brook."

—*Quoted by Al Makkari.*

THE first Spanish garden I saw, coming straight from New York, where the streets were slushy with melting snow, was at Algeciras. It was in late February and the beds were bordered with clipped Sage (*Salvia officinalis*) and had large bushes of Lavender and Geranium while a Bougainvillea glowed against the snowy walls. Over entrance ways and pergolas Wisteria hung its tapering panicles. It all smelt of almonds and spice and I thought I was in heaven.

Almost the first sensation upon landing in Spain is the scent of the Heather, Rosemary, or Lavender used to kindle the fires. One old-time writer said that these shrubs with the other fragrant herbs which grow wild along the seacoast were so fragrant that they could be smelt miles off at sea.

The Arabs, as we have seen in the previous chapter, were adepts at combining the scents of flowers and leaves and the Spaniards have continued to grow many fragrant plants. Whenever the choice lies between a scented or scentless variety the scented one is chosen. They grow plants without flowers or with inconspicuous ones for their fragrant leaves, such as Lemon Verbena, the Myrtles, Box, and all the herbs. Therefore, in a Spanish gardening book (at the risk of repetition), it seems appropriate to devote a whole chapter to fragrant plants to indicate the delights of a fragrant garden. For whether your garden is a tiny front yard in New

Rochelle or a terraced estate at Santa Barbara, it can be filled with sweet-smelling shrubs and herbs. For fragrant flowers grow wild in most parts of the world and you can dig up the Lemon-scented Sweet Ferns (*Comptonia asplenifolia*) from the roadsides of New York, the Sweet Pepper bushes (*Clethra alnifolia*) from the shores of Massachusetts, and Azaleas from the Carolina hills and plant them in the garden even if the sweet-scented plants grown along the Riviera and in California will not thrive for you.

Scent is used by some plants as a protection. The Cestrum, Lavender, Rosemary, Cistus, Sage, Thyme, and Myrtle, which grow along the Mediterranean coast, smell strongly in the hot sun and exude an oily fragrance which envelops the whole plant. This is perhaps a preventative against excessive evaporation of moisture and one writer thinks it is a protection against the goats and other nibbling animals who dislike the pungent, oily smell.

Some flowers smell strongest at night when their color has faded into the shadows and they have to depend on their fragrance to lure the moths to them. Nicotiana affinis, Cestrum noctrum, and Lychnis vespertiana are fragrant only at night. Petunias smell sweetest at dusk, as do the Tuberoses. Others are less chary with their charms and are sweet all day like clove Pinks and Roses.

After a rain when the earth is fragrant the flowers smell sweetest and the damp air of the sea or woods brings out their odors. The leaves of the Sweetbriar Rose are fragrant only when they are moist, and perhaps that explains why it is so popular in Scotland.

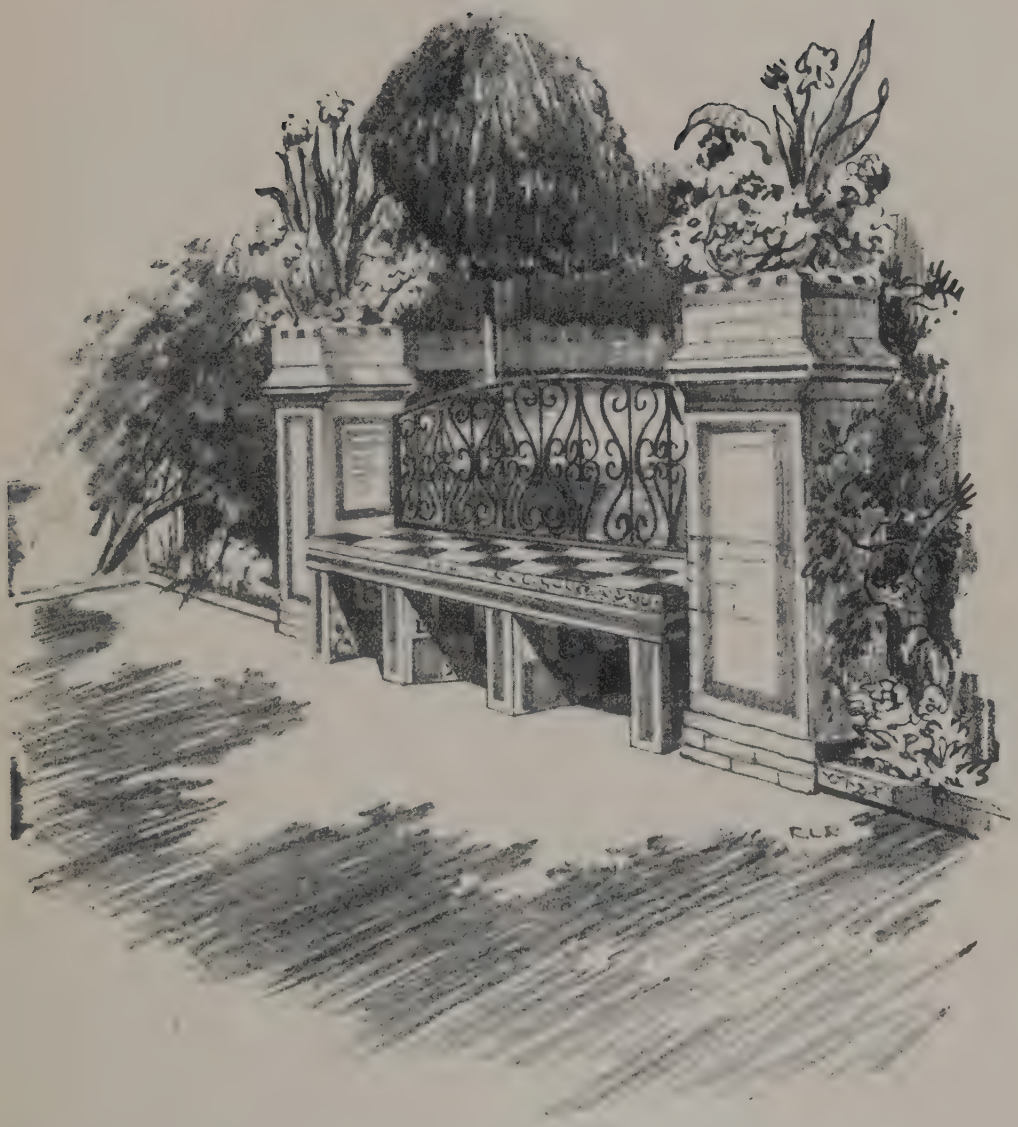
All fragrant plants do not have to be in the open and Lily-of-the-Valley will waft its fragrance from a shaded corner behind a screen of shrubs or a tiny Pyrola emit enough fragrance to perfume a sparse wood. Other fragrant woodland plants are Sweet Woodruff (*Asperula odorata*), Win-

tergreen (*Gaultheria procumbens*), some of the Primulas, the Violets, and Narcissi.

More white flowers are fragrant than any others, and next in order come red, then yellow and purple. There are few fragrant blue flowers, but then blue is a rare color in the floral world. Orange and brownish flowers are the least perfumed.

There are so many fragrant plants to choose from that we can pick out the ones with shiny-leaved foliage or keep to the wraithlike ones with gray-leaved plants. In a fragrant garden all of gray and white, to be a pleasant place on moonlit nights as well as during the day, the hedges would be of Lavender and the beds bordered with Sage and Santolina. In the interstices of the walks or edging them would be creeping Thymes, and at the corners would be clipped Rosemary (*Rosemarinus officinalis*) bushes, and the ground in the beds would be mantled with Violets and pink and purple Verbenas, and rising from them candidum and regale Lilies, white Petunias, and white Nicotiana affinis. There would be great bushes of Gypsophila for mistiness, and for accents, standards of white Kaiserin Augusta Victoria and perhaps a few Aloes or Yuccas, and purple pots of Southernwood (*artemisia abrotarium*) and Wormwood. White and pale yellow banksia Roses with a white or lavender Wisteria would garland the walls for spring, and Jasmine (*Jasminium sambac*) and Clematis paniculata would climb over the arbors and trellises for fall. Perhaps a dash of purple to deepen the effect would help, and for this one could have purple-flowering Clematis and standard Heliotropes. Such a garden could be anywhere, but if it were in a Southern climate the walks could be of white and violet pebbles and the fountains and stairways faced in shiny white tiles. The gray and white would have a dreamlike unreality, and from the leaves and flowers a delicious scent would rise like incense to the goddess of night.

In Northern gardens for fragrant trees one can have honey Locust beloved by the bees who in blossom time fill the air with their humming and spread the fragrance over the whole countryside. European Lindens have a fragrant blossom as any one knows who has walked through the alleys of Versailles the end of June or early July, when the sweet odors diffused through the park turn it into a world of rare essences. Flowering Crabs, notably Malus floribunda and Ioensis bechteli (smelling of Violets), give us small, fragrant trees as do the dwarf fruits which bear edible fruits as well. For shrubs, there are the Lilacs. The Persian varieties have a less spicy and heavier smell than the vulgaris whose fresh scent seems to express the untrammeled youthfulness of spring. The Azalea and Rhododendron families are fragrant and make luxuriant shrubberies. However, except for R. carolinianum, most of the Rhododendrons are too big for the small garden. Some of the Azaleas are quite spicy, such as Rhododendron arboreum (the Azalea's botanical name is Rhododendron). Lonicera fragrantissima can be clipped into a hedge. Its strongly fragrant flowers blossom so early in spring that often their scent heralds their arrival before we think of looking for them. Spicebush can be clipped into hedges, too, as can mountain Laurel, both with fragrant blossoms, and the Spicebush with fragrant leaves as well. But clipping the shrubs lessens their blooms, and for the scented garden, when possible, it is better to let the hedge grow freely with only enough cutting back to keep it within bounds. Other fragrant shrubs for cool climates are the Philadelphus, Clethra alnifolia, Viburnum carlesii, Privet, and the bush Roses. The hybrid perpetuals do well when treated as shrubs and the plain old varieties such as Magna Carta and Madame Plantier smell far sweeter than most of the stylish, more subtly colored new ones. Since Rosa damascena and Rosa centifolia, which are used for making perfumes, only smell when the petals are crushed, they do not add to the potpourri of the garden.



Tiled Bench with Wrought-iron Back, Plaza de América, Seville

Daphne cneorum is another fragrant little shrub for planting close to the tiled walks.

As edgings for the beds in a fragrant Northern garden one could have Sage, Thyme, Hyssop, Spearmint, Catnip, or Mint, but they would have to be kept rigorously in bounds as they love to send out suckers. To fill the beds one might start the season with fragrant Tulips (*Gesneriana lutea pallida*) smelling of lemon, Pansies, Violas, and Forget-me-nots. These last do not smell as sweetly in my garden as they do in Germany and in Switzerland where they scent whole hillsides and valleys. Clove Pinks are spicy and fine as edgings for the June border. In spring the Mustard family give us plants with a peppery tang, such as the Arabis alpina, Alyssum saxatile, Aubrietia, and the Wallflowers (there is an annual variety which flowers all summer).

The "big four," the mainstay of the perennial border, the Iris, Peonies, Phlox, and Chrysanthemums, have many fragrant members, but only a few, if any, of these can be used in the small garden. Other fragrant perennials are the Hemerocallis, Valeriana officinalis, the Golden Rods (*Solidago odorata*), the Bee Balms (*Monarda*), and the perennial Sages.

For fragrant annuals in any climate, one can have Sweet Alyssum (the lavender variety is more interesting than the white), Stocks, Nasturtiums, Mignonettes, Verbena, and Nicotiana. Sweet Peas are grown in pots in England, tied to stakes and sunk into the borders where they give height, fragrance, and pastel tones. The most reliable of all annuals are the sweet-scented Petunias. They go well in pots and are useful for cutting and to fill in spaces. White ones make good fillers and when tones of pink and lavender are mixed they are effective. The magenta ones have to be used with understanding.

In warm climates the choice of fragrant plants is larger, as there are many famous ones which cannot stand the cold winters. Whoever has

seen Heliotrope climb up to the second-story window in a Spanish patio and Geraniums behave like bushes will think his efforts to grow them in pots or beds in a Northern garden feeble ever after.

In our South we use hedges of sweet Olive whose inconspicuous blossoms smell like prune soufflé and when it is hot the warm odor makes your mouth water, if you are fond of that particular dish. Pittosporum is used for hedges and the variety toboria has fragrant flowers. Honeysuckle as a ground cover is delicious, especially where for miles and miles it covers both sides of a road as it does in Virginia. In a Southern garden one can grow all the herbs and fragrant flowers mentioned in the chapter "Limned Against the Southern Sky," and besides there are the Mimosas, Magnolias, Camellias (the very words sound like music), the Orange and Lemon (we have to repeat a few from the previous chapter in case the reader does not wish to turn back the pages). The Box and Myrtle make their fragrant hedges as well as Lavender and Sage; the saffron Crocus, Freesia, Cyclamen, Violet, Hyacinth, Tuberose, Narcissus, Heliotrope, and Lilies fill the beds and pots; Jasmine, Clematis give scented garlands against the walls. These are merely a few of the many fragrant plants which send out clouds of perfume in the gardens under Southern skies.

As many of these flowers are bulbs we can have them in less favorable climates by growing them in pots or beds and digging them up after they have flowered to winter them indoors.

The fragrant garden can be planted with herbs to resemble a mediæval garden or be composed of sweet-smelling flowers native to the district. It is fun to collect a certain kind of plants, and to seek the sweet ones from among them is a pleasant hobby.

The different smells can be scattered to give mixed effect like the perfume of many flowers called "Quelques Fleurs," or they can be separated so that each is smelt by itself. Since the sensation of smell is fleeting it is

best to have two or three different scents to follow in succession. First the scent of the Rose festooned over the entrance, and near the front of the border the spicy Clove Pinks and then wafted from the rear the heavy scent of auratum or regale Lilies. The different scents would reach us like so many chords of music, and if the plants were repeated in the border at regular intervals, the sequence of fragrance would be repeated, too, like the pattern of a melody.

Like a good teacher having first given the positive side, I will now mention a few "don'ts." The African and French Marigolds should not be near the house, as they have a disagreeable smell. Ageratum is such a useful plant it is too bad it has an unpleasant animal odor, and although this is noticeable only when you come close to it, in a small garden, where one is necessarily limited to the choicest plants, they had best be left out. Tuberose and auratum Lilies and other strong-smelling plants should be placed where there is a current of air. A wind-swept garden can stand more fragrant plants than a sheltered one enclosed on all sides by high walls.

Use discretion with your perfumes and select a few which will give you a succession of fragrances through the whole season. Let it be a gentle perfume with here and there a sharp, spicy tang, and only have one or at most two heavy-smelling plants which have a rich odor like an Oriental princess walking past in splendid apparel.

Why any one wants scentless Roses when he can have fragrant ones is beyond comprehension. But some are so wedded to the "big" and the "showy" that they prefer their Frau Karl Druski to the tea- and fruit-scented Mrs. Aaron Ward or the tea-scented Duchess of Wellington. But the longer we garden the more we care for subtle shades and differences, and one of the most subtle as well as the most delightful fields for delicate discrimination is to grow different kinds of fragrant plants.

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